

PUBLIC SERVICE COMMISSION

OF WEST VIRGINIA

CHARLESTON

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MONONGAHELA POWER COMPANY and*

THE POTOMAC EDISON COMPANY * 17-0296-E-PC

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HEARING TRANSCRIPT

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BEFORE: MICHAEL ALBERT, Chairman

RENEE LARRICK, Commissioner

BROOKS MCCABE, JR., Commissioner

HEARING: Wednesday, September 27, 2017

8:33 a.m.

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P R O C E E D I N G S

CHAIRMAN:

We are on the record in --- back on the record in Case Number 17-0296-E-PC. We have been advised by our clerk that there's been a request for taking Mr. Dorn from Harrison County Power and Brooke County Power out of turn. He was the next scheduled witness after the company witnesses. I don't like to interfere with the flow of the Companies' presentation, but they have agreed it's okay to do that.

So in order to accommodate Mr. Dorn, who is running the efforts to certificate and construct gas powered plants in West Virginia and I'm sure has his hands full, we're going to take him as the next witness. So saying normally --- this caught me by surprise. Go ahead.

ATTORNEY HANNA:

Thank you, Mr. Chairman, Commissioners. ESC Brooke County Power and ESC Harrison County Power call Andrew Dorn, IV to the stand.

ANDREW DORN, IV, HAVING FIRST BEEN DULY SWORN, TESTIFIED AS FOLLOWS:

1 DIRECT EXAMINATION

2 BY ATTORNEY HANNA:

3 Q. Mr. Doran, would you please state your full name
4 and business address?

5 A. Yes. It's Andrew W. Doran IV. My business
6 address is 360 Delaware Avenue, Buffalo, New York.

7 Q. Mr. Doran, by who are you employed and in what
8 capacity?

9 A. My employer is Energy Solutions Consortium and I
10 am the president.

11 Q. You submitted and prepared Direct testimony in
12 this case, have you not?

13 A. Yes, I did.

14 Q. You did not submit any Rebuttal testimony; is
15 that correct?

16 A. I did not.

17 Q. You have been previously handed a copy of what
18 has been marked for identification purposes as Exhibit
19 ESC AWD-D, which is a copy of your Direct testimony filed
20 August 25th, 2017, which consists of a cover page, nine
21 pages of testimony and two pages of Appendix A. Is that
22 correct?

23 (ESC Exhibit AWD-D marked for
24 identification.)

25 A. That's correct.

1 BY ATTORNEY HANNA:

2 Q. Was that exhibit prepared by you or under your
3 supervision?

4 A. Yes, it was.

5 Q. If I were to ask you the same questions that are
6 in that testimony today, would your answers be the same?

7 A. Yes, they would be.

8 Q. Do you have any changes you think are necessary
9 in your testimony or any corrections?

10 A. I do not.

11 Q. Are you willing to adopt that testimony as your
12 sworn testimony in this case?

13 A. Yes.

14 Q. Thank you, Mr. Dorn.

15 ATTORNEY HANNA:

16 I would move that the Exhibit AW ---
17 ESC AWD-D be admitted into evidence.

18 CHAIRMAN:

19 Subject to Cross Examination, it will
20 be admitted. Ms. Roberts.

21 ATTORNEY ROBERTS:

22 Thank you, Mr. Chairman. I have no
23 questions of this witness.

24 ATTORNEY PEPPER:

25 No questions, Your Honor.

1 CHAIRMAN:

2 All right.

3 ATTORNEY WILLIAMSON:

4 WVEUG have no questions, sir.

5 ATTORNEY AUVILLE:

6 Thank you, Your Honor. I actually have
7 a few.

8 ATTORNEY RODECKER:

9 They'll be no questions from ---.

10 CHAIRMAN:

11 Oh, I'm sorry. Do you want to ask your
12 questions of him?

13 ATTORNEY RODECKER:

14 No, Your Honor.

15 CROSS EXAMINATION

16 BY ATTORNEY AUVILLE:

17 Q. Good morning, Mr. Dorn. How are you?

18 A. Good morning. Good, thank you.

19 Q. I'd like for you to turn to page six of your
20 testimony.

21 A. Sure.

22 Q. At the bottom of page six and continuing to page
23 seven, you discuss the investment in gas pumps in the
24 surrounding states. And you say that investment in West
25 Virginia has not occurred because of regulatory

1 uncertainty. What do you mean by regulatory uncertainty?

2 A. Sure. Really what is occurring is, of course,
3 the PSC's been really spending a lot of time with the
4 capital providers to these projects. And there's a
5 discussion by those capital providers, which they're very
6 sophisticated investors, that leads them to believe that
7 West Virginia is not of the state that is running the
8 natural gas-fired generation.

9 And what informs that view for them is really
10 some facts that we worked very hard to dispute. We don't
11 believe that to be the case, but nevertheless, it is
12 their perception that, you know, West Virginia's a coal
13 state, has historically been a coal state. And there's
14 going to be a very difficult time to be cashing in
15 support for a gas-fired plant. And really what informs
16 that view for them is the backdrop that we're seeing
17 right now. As I discussed in my testimony, there's been
18 approximately \$20 million of investment in combined cycle
19 natural gas plants in the immediately surrounding states.
20 To date, there has not been any in West Virginia.

21 There is another approximately \$20 million of
22 plants under development in these states, and our capital
23 providers are not going to support an additional \$20
24 million of buildout in this current building cycle. And
25 when these capital providers walk to give us their

1 capital, it's very significant investments, ESC's plant
2 which will hold approximately \$1.4 billion of investment
3 in the state. They want to make sure that there's a very
4 clear ready to go framework that supports that
5 investment, and supports it for the long-term life of the
6 plant.

7 And what gives them pause currently is they look
8 at track record and they say, wait, it makes all the
9 sense in the world that these plants would be built in
10 West Virginia. The high voltage transmission lines are
11 already here and they support a lot of basehold for the
12 generation. The assets are already there. So they
13 scratched their head a bit and say, why has this not
14 occurred. That reinforces that perception for them.

15 And then they look at some of the things that
16 have occurred with coal plants in the state and that
17 becomes very concerning to them that there is not the
18 ready to go framework to support that investment. And my
19 primary concern is if this transaction is approved is
20 it's going to be reinforcing that message. And the view
21 held by that community, whether right or not is I'd say
22 very much in line with the editorial that we saw in the
23 Charleston Gazette this weekend from Jamie Van Nostrand,
24 the WVU Professor. And that belief is that this is not
25 an economic transaction, this is not an economic plant.

1 This will be an outer market state sponsored subsidy for
2 this plant. And really, the concern is that that does
3 distort our devices and further, you know, acclimates
4 that, hey, this is stepping up to help coal miners in the
5 long run.

6 And, you know, under that scenario, that just
7 leads to other questions if we come into play with
8 capital in the state what's the next thing that may occur
9 that could hurt that, that investment long term, is there
10 going to be a natural gas tax. And that's what is at
11 that framework where there's kind of very tried and true
12 in some of these states so they feel very comfortable on
13 that capital. I think it could even be detrimental long
14 term to put an investment in the state. West Virginia
15 has had a long legacy of a power exporter, approximately
16 15,000 megawatts today, and you know, old plants are
17 aging. The aggregate of all West Virginia is four years
18 older, they're not going to last forever. It's very
19 important that West Virginia has a diverse base of
20 generation resources. I mean, -.

21 CHAIRMAN:

22 Are you just repeating your testimony
23 or are you answering a question?

24 A. Fair enough.

25 BY ATTORNEY AUVILLE:

1 Q. Let me ask, other than denying this transaction,
2 is there something that this Commission could do to help
3 encourage more investment in the state?

4 A. Yes. And again, I think we have had a very good
5 working relationship with the Commission.

6 CHAIRMAN:

7 You sound like it.

8 A. Discussing the views that the capital providers
9 have, not our views.

10 CHAIRMAN:

11 You tell the capital providers when
12 they say that.

13 A. We try to point to the facts of why these are
14 good investments as well as why it makes sense from the
15 underlying fundamentals in the market. But believe me,
16 unfortunately, we spend a lot more time than we would
17 like refuting those points.

18 And what the Commission can do, and I think
19 they've been very good at doing this, helping encourage
20 these plants to staying to the regulatory schedule. We
21 do have a survey speed to market. It's very important in
22 the current market environment.

23 BY ATTORNEY AUVILLE:

24 Q. I just have one more question, and it's kind of
25 tied to one of the questions that Chairman Albert asked

1 Mr. Roberto yesterday.

2 As you're a power developer, what is your view
3 of the future of the Pleasants Plant if this transaction
4 doesn't get approved by this Commission?

5 A. Yeah. I have studied Pleasants, not to the
6 extent that I need to to have a very good accommodation.
7 You know, I can say the coal burning generation is a
8 little bit more pressured due to the current natural gas
9 environment. And my view on it, as well as the view on
10 the capital providers in the market is that environmental
11 for natural gas and all the prices have been depressed,
12 long term. So I can't say what that means for Pleasants
13 for its financial liability, but we expect market
14 conditions similar to today to persist well into the
15 future.

16 ATTORNEY AUVILLE:

17 That's all I have.

18 ATTORNEY BECHER:

19 No questions from Sierra Club, Your
20 Honor.

21 ATTORNEY CALLAS:

22 Yes, a few questions.

23 CROSS EXAMINATION

24 BY ATTORNEY CALLAS:

25 Q. Good morning, Mr. Dorn.

1 A. Good morning.

2 Q. Following up on Mr. Auville's last question
3 there, in your testimony, you state that Pleasants will
4 continue to run regardless of who owns the plant and
5 will, therefore, burn the same amount of coal; correct?

6 A. Correct.

7 Q. Okay. So you think it would continue to run and
8 it won't close?

9 A. Well, that would certainly be a decision for the
10 asset owners. And if it's financially viable, I believe
11 it would continue to run, yes.

12 Q. Okay. Mr. Auville asked you some questions,
13 too, about the state --- or at least your answer went
14 into that, the state regulatory process. Are there any
15 projects that have been brought to the Commission for
16 citing certificates that --- or to West Virginia as a
17 whole that are not being approved?

18 A. For a citing certificate?

19 Q. Yes.

20 A. Not for a citing certificate. There's been
21 three projects, natural gas projects to date.

22 Q. Okay. So when you talk about the regulatory
23 environment, you're not referring to the PSC?

24 A. No. No, I'm not.

25 CHAIRMAN:

1 I believe I answered that one.

2 A. And again, much of what I was speaking to is the
3 capital provider's perception of the regulatory
4 environment.

5 BY ATTORNEY CALLAS:

6 Q. Okay. Harrison County Power's citing
7 applications pending before the Commission now; correct?

8 A. That is correct.

9 Q. All right. But there's a number of other
10 permits that are outstanding for that plant?

11 A. I would say permits required from financing.
12 There's one other outstanding permit at this point in
13 time.

14 Q. And that's the deal, to own and operate the
15 plant?

16 A. No. There's minor --- a variety of minor
17 construction permits that are required either prior to
18 commencement of construction or during the construction.

19 Q. I think in your application you said about 25
20 approvals or permits that you needed. So do you have
21 those 25 or close to it?

22 A. No. Again, for these plants to come into
23 fruition, you need to be able to close on the non-
24 recourse debt financing. You do not need all 25 of those
25 permits to be able to do that.

- 1 Q. So Harrison doesn't have financing yet?
- 2 A. No, it is not full-stop on a debt finding yet.
- 3 Q. How about for Brooke County, that's been before
- 4 the Commission. It has a number of permits and
- 5 approvals, I presume they need to obtain?
- 6 A. That is correct.
- 7 Q. Okay. Have you obtained those?
- 8 A. Not all of them. We are in the process.
- 9 Q. All right. And they're financing as well?
- 10 A. Not yet. You can't finance it until you have
- 11 those permits.
- 12 Q. Okay. Mr. Dorn, you're involved in the
- 13 Moundsville Power Plant as well, were you not?
- 14 A. Yes. We were the original developers of
- 15 Moundsville.
- 16 Q. What's the status that Moundsville has?
- 17 A. Moundsville air permit is being challenged in
- 18 court in West Virginia.
- 19 Q. Okay. So has that plant, has it damaged the
- 20 project?
- 21 A. The plant is seriously challenged at this point.
- 22 And again, that's my comments that reinforce the view
- 23 from the Capital of America Providers, that it's a very
- 24 difficult environment in West Virginia.
- 25 Q. Okay. Has it lost its status in the PJM queue

1 regarding that connection?

2 A. It has because of the air permit issue. And
3 again, that's my comments on a regulatory process with
4 speed. Many of these permits are time-sensitive. And if
5 things do not line up appropriately, they expire.

6 Q. So would you agree that there's significant risk
7 with building a power plant from the ground up?

8 A. Sure, absolutely.

9 Q. Is cost overrun a risk?

10 A. No. We would --- our commercial model is the
11 eight turnkey fully-wrapped EPC contract. So that
12 removes the risk. And to, you know, further highlight
13 that point, once you close on that debt financing, a lot
14 of those risks are mitigated. And these plants are very
15 close to being at that point where a lot of the risk is
16 mitigated.

17 Q. Are you aware of other power plants that are in
18 the United States that have had cost overrun issues?

19 A. Sure. But it depends who's wearing that cost
20 overrun. I'll point to a good example. In Virginia, the
21 plant built by Spor for Dominion that ran \$150,000,000
22 over budget. And it was full turnkey wrapped project.
23 So the utility Dominion did not wear that risk. Very
24 similar to our approach.

25 Q. Okay. You mentioned, Mr. Dorn, during your

1 testimony that a PPA coupled with performance guarantees
2 eliminate any performance and cost risk for MonPower
3 related to the O&M. Do you recall that?

4 A. I do.

5 Q. Are you aware that the Grant Town proceeding
6 that's presently before this Commission, which is a PPA
7 in which the owner is wanting more money for the power
8 under its long-term power contract?

9 A. I have read about it in the trade publications,
10 yes.

11 Q. Are you aware of the North Branch project over
12 in the company service territory in Grant County, which
13 was a PPA that closed down? It reached the purchase
14 power agreement and shut their doors.

15 A. No, I'm not familiar with that one.

16 Q. Do you think there could be advantages to
17 MonPower running a physical asset as opposed to a
18 contract?

19 A. Sure.

20 Q. Such as economy-to-scale for coal purchasing?

21 A. That is a potential advantage.

22 Q. An allocation to back-off this cost?

23 A. Uh-huh (yes.)

24 Q. Maybe the ability to leverage other assets
25 against the others for bidding purposes for capacity

1 and/or energy?

2 A. I don't know if I'd say that that would be
3 distinguished between. A PPA should give you that same
4 flexibility to manage your PJM bidding strategy.

5 Q. Okay. Mr. Dorn, your testimony, you mentioned
6 that if the purchase of Pleasants is approved, it would
7 be viewed by the financial markets as irrational,
8 economic state-level subsidy. And it would send a signal
9 to the financial markets that there's a high degree of
10 regulatory uncertainty. Similar to what Mr. Auville
11 mentioned to you?

12 A. That's correct.

13 Q. Was the transfer of AMOS Three to APCO, was that
14 an irrational economic state-level subsidy?

15 A. In retrospect, I think that argument could be
16 made.

17 Q. We're vertically-integrated here in West
18 Virginia, are we not?

19 A. That is correct.

20 Q. Okay. With the duty to provide service to
21 customers with capacity?

22 A. Correct.

23 Q. Okay. How about the Harrison transaction by
24 MonPower back in 2013?

25 A. Sure. No, I think to preface my answer, this is

1 a far different world, a far different commodity price
2 environment than four years ago. But I think the
3 financial metrics on that transaction are not favorable.

4 Q. And your opinion would be the same with Mitchell
5 transaction as well?

6 A. Correct.

7 Q. Okay. You mentioned Pleasants currently is not
8 buying the majority of its coal --- is buying the
9 majority of its coal from outside of West Virginia.

10 Where do you base that statement on?

11 A. Publicly available data from S&L Energy.

12 Q. I see. Will you look at the EIA reports for
13 sourcing a coal-fire plant?

14 A. I've looked at the S&L data to obtain that
15 information.

16 Q. And S&L, I apologize, I'm not familiar with that
17 trade publication.

18 A. Yes, it's probably the industry standard data
19 provider to lender the business. And that data may be
20 based on underlying information from the EIA. I'm not
21 sure.

22 Q. Did you look at S&L over the summer delivery
23 months of this year?

24 A. I don't recall.

25 Q. Okay. It could have changed since then?

1 A. It could change month-to-month, I'm sure.

2 Q. Okay. Just a few more questions, Mr. Dorn.
3 You're aware your bid was non-conforming, right?

4 A. Yes, I am.

5 Q. Okay. And you did not bid in that. So I'll
6 just say you read the PPA.

7 A. Correct.

8 Q. After your bid, did you contact CRA at all to
9 ask them about your proposal and whether or not a net
10 present value analysis was performed on the bid?

11 A. No, we did not.

12 Q. Why did you not?

13 A. I believe there were a number of rules
14 specifically stated in the RFP that they did not want a
15 lot of dialogue between the bidders and CRA.

16 Q. They did not want dialogue between?

17 A. So, you know, the question --- you look at a lot
18 of the bid documents. It wasn't a --- it was a very
19 short process. And there was not a lot of dialogue in
20 advance or during the bid preparation.

21 Q. Would you be surprised if CRA did, in fact, run
22 an NPV analysis with the information you had provided?

23 A. I'm not close to the process. So I can't judge
24 one way or another.

25 Q. Would you believe that your bid for your

1 combined cycle plants should come in fairly close to
2 other bids for a combined cycle plant?

3 A. Well, if no other PPAs would bid, I'm not sure
4 how that would happen.

5 Q. Well, physical assets could have been bid for a
6 combined cycle plant; correct?

7 A. That's correct.

8 Q. Okay. And would you believe that PPA would have
9 come in fairly similar to the combined cycle asset bid?

10 A. You know, I can't speak to their bid. I believe
11 our bid was a very competitive market bid, but ---.

12 Q. Did you see Mr. Eads had testimony where he ran
13 an analysis of your bids as well as the combined cycle
14 bid and found it to be about one-third as a positive NPV
15 at Pleasants? Do you recall that?

16 A. No, that is not how I remember Mr. Eads'
17 testimony.

18 Q. You do not, huh?

19 A. No. My impression was he was analyzing the
20 assets offered, not the PPA.

21 Q. I'll let his testimony stand.

22 A. Sure.

23 Q. We'll ask him to describe it.

24 A. Sure. And again, I think that analysis is all
25 --- you know, it's all based on commodity price outlook.

1 If I recall, Mr. Eads did say in a bold natural gas and
2 power price environment, the economics were more capable
3 for a gas plant. And that is my view and the likely-held
4 view by the capital providers in the market of the
5 realistic future that we'll be facing.

6 Q. Okay. So on page 32 in his testimony, he said
7 the PPAs came in about one-third of the positive value of
8 Pleasants. You just --- you mean to dispute that or you
9 interpret his opinion differently?

10 A. Yes, I guess I would probably dispute the
11 commodity price curbs on that underlying assumption.

12 Q. Okay. No further --- one moment, please. One
13 final question. Do you know generally the number of
14 employees at a typical combined cycle natural gas plant?

15 A. It's far fewer than coal. You're generally 30.
16 In the neighborhood of 30 employees.

17 ATTORNEY CALLAS:

18 Thank you very much.

19 A. Sure.

20 CHAIRMAN:

21 Any questions?

22 ATTORNEY ROBERTS:

23 No questions.

24 CHAIRMAN:

25 I have a question I was going to ask.

1 The 30 employees, is that for all three of them or is
2 that at each one of them?

3 A. No, each one.

4 CHAIRMAN:

5 After it's up and running, you'll have
6 30 employees?

7 A. Correct, in that general vicinity.

8 CHAIRMAN:

9 Three eight-hour shifts roughly?

10 A. Correct. Correct. It will be staffed around
11 the clock.

12 CHAIRMAN:

13 The public comment hearings, and the
14 hearing in Moundsville, and that were conducted both in
15 Moundsville Power, and the public comment hearings for
16 the two gas-fired plants that you all were sponsoring,
17 the issue, what we refer to as externalities, which is
18 employment, public funding to the County's Board of
19 Education, funding to the Public County Commission,
20 employment, business and industry in the area, that was
21 soundly discussed, was it not, in each one of these?

22 A. Yes, it was.

23 CHAIRMAN:

24 And it's one of the items that you all
25 hit very hard in your discussion, both with the public

1 and with the Commission?

2 A. Yes, sir.

3 CHAIRMAN:

4 Don't chastise. The proceedings that
5 we're undertaking was an undercoat with respect to Mount
6 Storm, you were always granted a certificate at
7 Moundsville, were you not?

8 A. Yes, we were.

9 CHAIRMAN:

10 Conditioned on you completing some
11 other requirements?

12 A. That's correct.

13 CHAIRMAN:

14 And you haven't been turned down in the
15 other two at all, have you?

16 A. No.

17 CHAIRMAN:

18 Have there been any delays in the
19 schedule by this Commission?

20 A. No, there have not.

21 CHAIRMAN:

22 And we're set for hearings for one or
23 both of them, are we not?

24 A. Yeah, the hearing is in two weeks, I believe.

25 CHAIRMAN:

1 Yeah.

2 A. Yes.

3 CHAIRMAN:

4 And there's a fairly elaborate statute
5 that tells us all we have to go through in order to do
6 that, does it not?

7 A. Yes, sir.

8 CHAIRMAN:

9 All right. That's all I have. Thank
10 you, sir.

11 A. Thank you. And thanks for accommodating my
12 schedule today.

13 CHAIRMAN:

14 You're quite welcome. You're excused.

15 A. Thank you.

16 CHAIRMAN:

17 Yes, sir. MonPower/PE, call your next
18 witness?

19 ATTORNEY CALLAS:

20 We call Mr. Bob Lee.

21 -----

22 ROBERT LEE, HAVING FIRST BEEN DULY SWORN, TESTIFIED AS
23 FOLLOWS:

24 -----

25 DIRECT EXAMINATION

1 BY ATTORNEY CALLAS:

2 Q. Would you please state your name and by whom
3 you're employed?

4 A. Sure. My name's Robert Lee. And I'm employed
5 by Charles River Associates in Boston.

6 Q. And Mr. Lee, you previously prepared and caused
7 to be filed in this case, Direct and Rebuttal testimony?

8 A. Yes.

9 ATTORNEY CALLAS:

10 Your Honor, those previously have been
11 marked in accordance with your direction.

12 (Companies Exhibit RJL-D marked for
13 identification.

14 (Companies Exhibit RJL-R marked for
15 identification.)

16 CHAIRMAN:

17 All right.

18 BY ATTORNEY CALLAS:

19 Q. Do you have those before you, Mr. Lee?

20 A. I do.

21 Q. Do you have any additions or corrections?

22 A. I do not.

23 Q. You do not. If I were to ask you the questions
24 contained in your Direct and Rebuttal testimonies, would
25 your answers be the same?

1 A. They would.

2 Q. And you adopt that as your sworn testimony?

3 A. I do.

4 ATTORNEY CALLAS:

5 Thank you, Mr. Lee. The witness is
6 available for Cross Examination. I would move both
7 pieces of testimony.

8 CHAIRMAN:

9 All right. Subject to Cross
10 Examination, we'll admit the Direct and Rebuttal
11 testimony as related exhibits and related exhibits filed
12 by Mr. Lee. And we will start with CAD.

13 ATTORNEY ROBERTS:

14 Thank you. The witnesses have worn me
15 down. I'm sitting.

16 CROSS EXAMINATION

17 BY ATTORNEY ROBERTS:

18 Q. Good morning, Mr. Lee.

19 A. Good morning.

20 Q. I'm Jackie Roberts from the Consumer Advocates
21 of West Virginia. And I want to start by asking you some
22 questions about your opinion letters.

23 A. Sure.

24 Q. Could you turn to your opinion letter?

25 A. Yes, I have it here.

1 Q. I see at page one in the first paragraph that
2 you state CRA is an independent third-party managing the
3 RFP process. Do you see that?

4 A. I do.

5 Q. So and then in addition, you say in the sentence
6 before that MonPower sought to satisfy this need with
7 1,300 megawatts of capacity. Do you see that?

8 A. I do.

9 Q. And to satisfy it to generation; correct?

10 A. That's correct.

11 Q. I want to try to understand the process of your
12 involvement with MonPower in this RFP. Please tell me if
13 my understanding is correct. That the criteria for the
14 RFP are established. In other words, a physical asset
15 where it's located, how much generation is needed. And
16 then CRA as the third-party designs and administers the
17 RFP. Is that accurate?

18 A. That's generally correct. I mean, it would be
19 true within the MonPower case and with other clients we
20 have, that CRA would work with our client to help refine,
21 you know, what their need is and talk through how that
22 should be handled in the RFP process just to make sure
23 that we had as much competition as we can in the process.

24 Q. Okay. And on page three of your RFP, you state
25 that MonPower desired to acquire dispatchable physical

1 resources.

2 A. Can you point me to that?

3 Q. Yes.

4 A. Oh, I think I see it at the top here on page
5 three.

6 Q. Is that accurate?

7 A. Yes, that is accurate.

8 Q. So that they came into this process knowing that
9 what they wanted was a physical asset, and you accepted
10 that?

11 A. CRA, this would be an example of where we would
12 work with our clients. They may come to us with a desire
13 for a physical asset. We'd talk through what other
14 options there are, the pros and cons. So I wouldn't
15 describe it as they came to CRA with a list of this is
16 what we need. They came to us with --- you know, with a
17 need. And we talked through what the options would be.

18 Q. They had a pretty good idea of what they wanted,
19 didn't they?

20 A. Sure.

21 Q. And you talked through the options?

22 A. That's true.

23 Q. And did you disagree with anything they wanted
24 and that was ultimately in the RFP?

25 A. I don't know if I'd describe it quite that way,

1 that they came sort of with a list. I mean, they came
2 with a need. And we talked through what the options
3 were, and then they evolved. And at the end of the
4 process, we had an RFP. I don't think it was, you know,
5 the way I'm hearing you describe it is it's kind of like
6 a check list. We wanted this. We wanted this. And then
7 we confronted each of those issues. It doesn't really
8 work like that.

9 Q. But yet, you knew from the trade press that
10 First Energy wanted to transfer Pleasants to MonPower,
11 did you not?

12 A. I was generally aware of that. That didn't
13 really come up very much in the discussions about their
14 need.

15 Q. So you knew their need was --- you knew they
16 said their need was 1,300 megawatts?

17 A. I was aware of the IRP that was done.

18 Q. So did you talk to them about a purchase power
19 unit?

20 A. Whenever we do these RFPs with capacity, we talk
21 about purchase power as an option.

22 Q. And how is that received?

23 A. You know as it is with similar, most projects
24 I've been involved with where we talk about the pros and
25 cons. I don't know if it was received in any specific

1 --- you know, I can't recall a specific reaction about
2 how they received that.

3 Q. But again, it's not in the RFP. So it was
4 rejected?

5 A. It was rejected. And I mean, I think Mr.
6 Ruberto talked about some of the reasons why. You know,
7 there are some advantage to physical ownership of an
8 asset.

9 Q. And so you completely agreed with Mr. Ruberto on
10 physical assets in excluding, for instance, PPAs from the
11 RFP?

12 A. I did agree with the decision to exclude PPAs
13 from the RFP.

14 Q. Were there other criteria established upfront
15 for the RFP? One was physical capacity; correct?

16 A. That's correct.

17 Q. And I think in your opinion letter, you discuss
18 this, don't you? What the criteria are, the non-price
19 criteria?

20 A. I'm sorry. I'm not sure what the question is
21 exactly.

22 Q. Well, let me ask you this. Did you look at the
23 MonPower IRP?

24 A. I did look at the MonPower IRP.

25 Q. And can you tell me where in that IRP it said

1 that the Company needed 1,300 megawatts of capacity?

2 A. I don't know that I can point to the exact
3 location. I've read the RFP. I'm just generally aware
4 of the options that were discussed.

5 Q. And it's your testimony, the IRP's stated that
6 the company needed 1,300 megawatts of capacity?

7 A. No, that's not my testimony. I don't know that
8 the IRP states a specific need and at that level of
9 detail.

10 Q. So you read the IRP that stated the capacity
11 that was needed?

12 A. Yes. I read the IRP. So I had a general
13 awareness of MonPower's process in characterizing the
14 need.

15 Q. All right. On page three of your opinion
16 letter, you stated that you identified 20 existing assets
17 within the APSM. Do you recall that?

18 A. Yes, I do.

19 Q. Why did you do that?

20 A. Well, you know, it's part of the sort of
21 preparation to launch the RFP process. We wanted to know
22 what assets we were potentially marketing in the process
23 to make sure everybody's aware of the opportunities. And
24 to get them to register, to be aware of the process, and
25 that they can ask questions, so on and so forth.

1 Q. Was part of that in effort to assure yourselves
2 that there were resources that could bid in this RFP?

3 A. I was confident that there would be resources
4 that would be available to bid into the IRP who wanted to
5 know which assets there were in profit.

6 Q. And on what basis were you counting there would
7 be, other than the --- that's the announcement that
8 Pleasants could be transferred into a regulated utility.
9 What other information did you have that made you
10 confident that there were assets?

11 A. Well, I mean, I've worked for the last 20 years
12 in energy consulting. I'm familiar with PJM and the
13 assets that exist in West Virginia.

14 Q. So I want to talk a little bit about the lists
15 of --- the list of generators you contacted them in
16 advance to notify them of the RFP.

17 A. Okay.

18 Q. Do you have that list with you?

19 A. I do not.

20 Q. I can get it. Okay. This is a document that
21 was marked CAD Cross-7. It's already been admitted into
22 the record. If you look at page two, there is a listing
23 of the assets. Does this look like the list of assets
24 you've contacted?

25 A. It does, yes.

1 Q. Okay. And so you contacted Longview Power?

2 A. I believe Longview Power originally reached out
3 to us. They were aware of the RFP launch and were
4 anxious to put this bid. So I think the initial contact
5 with Longview came from that step.

6 Q. So if they were aware of the RFP launch, it was
7 after December 16th?

8 A. I don't recall the exact timing. The RFP was
9 announced through a press release on ---.

10 Q. Yes, it was. And it was launched on December
11 16th, was it not?

12 A. It was.

13 Q. So by December 16th, you had not reached out?

14 A. We didn't start the outreach until the official
15 launch of the RFP itself. As you might imagine, you
16 know, we don't have phone numbers and contact information
17 readily available for all who contacted us. We had
18 actually been trying to contact Longview Power. And it
19 was a different person at Longview Power that eventually
20 reached out to us.

21 Q. You didn't look at the phone number?

22 A. We didn't know the phone number of the correct
23 contact person.

24 Q. And the phone number you had, you had no
25 information.

1 CHAIRMAN:

2 Hold on. Hold on just a second.

3 Please everybody silence your phone.

4 BY ATTORNEY ROBERTS:

5 Q. Okay. So you would have contacted Longview
6 Power had you known their phone number and who
7 specifically to contact?

8 A. That's correct.

9 Q. Well, Mr. Ruberto testified yesterday --- were
10 you here yesterday?

11 A. I was.

12 Q. Did you hear him say that you reached out to
13 these generating asset owners in advance of the launch of
14 the RFP?

15 A. I don't recall that specific response. In
16 preparation for testimony, I went back and sort of
17 checked the timing on all of this. We set up a list in
18 advance. And then as soon as the launch was public, we
19 began reaching out to the parties. We reached out by
20 phone and by email.

21 Q. And that was the week before Christmas 2016?

22 A. That's correct. Starting the 16th. So more
23 than a week before Christmas.

24 Q. Starting the 16th or Monday?

25 A. I believe on the date of the launch, we started

1 to reach out.

2 Q. And when was the launch on the 16th?

3 A. Are you asking what time of day?

4 Q. Yeah.

5 A. I don't know. I don't recall that.

6 Q. Do you see the next asset's Harrison?

7 A. Yes, I do.

8 Q. Did you contact MonPower about the availability
9 of Harrison to bid in this RFP?

10 A. We did not talk directly to MonPower about that.

11 Q. Why not?

12 A. MonPower already owns those facilities.

13 Q. Okay. Pleasants? You contacted Pleasants?

14 A. I believe we would have reached out to
15 Pleasants, yes.

16 Q. And that would have been the week before, the
17 week that the pre-qual bids were due; is that correct?

18 A. That's correct.

19 Q. Okay. Bath Energy Facility?

20 A. As far as I know and as far as I'm aware, we
21 reached out to all of the facilities on this list that
22 were not owned by MonPower.

23 Q. Did you reach out to any of the facilities that
24 had a nameplate rating of under 100-megawatts?

25 A. We would have, yes.

1 Q. Did you hear Mr. Ruberto's testimony yesterday
2 that nameplate facilities of less than 100 megawatts
3 weren't contacted? Is that incorrect?

4 A. We reached out to all these facilities. What I
5 think may have --- I don't want to characterize Mr.
6 Ruberto's testimony. It may have been that there was a
7 100-megawatt limit on who can participate. But that
8 doesn't mean that we shouldn't reach out these
9 facilities. They may have the ability to expand the
10 site. We were willing to accept plants that are in
11 development. So a site expansion is a possibility. And
12 we wanted to make as many people aware of the process as
13 possible.

14 Q. When you say you reached out, how did you do
15 that? I know you said for Longview, you didn't have a
16 phone number. So you didn't know who to call. Did you
17 call these facilities?

18 A. We called when we could. And we also used
19 e-mail.

20 Q. So when you contacted Warrior Run, what did they
21 say?

22 A. I don't recall specifically what anybody said.

23 Q. Were you under the impression that Warrior Run
24 could offer into the RFP?

25 A. We didn't want to make assumptions about what

1 flexibility any of the facilities had with respect to the
2 power purchase agreements in place. We just wanted to
3 make everybody aware of the process and generate as much
4 interest as we possibly could in the process.

5 Q. All right. But as a professional, wouldn't your
6 expectation be that PURPA plants would not likely
7 candidates for an RFP?

8 A. As I said before, and I think as Mr. Ruberto
9 said yesterday, we don't know what flexibility they might
10 have.

11 Q. But would you expect them to have the
12 flexibility to fit into an RFP?

13 A. I wouldn't make any kind of an assumption like
14 that.

15 Q. What about the Allegheny Energy Units? What did
16 they say when you contacted them?

17 A. I think I've already said it. I don't recall
18 specific details about these discussions.

19 Q. Do you recall any details in any of your
20 communications with any of these generators?

21 A. I'm trying to see. There's nothing really
22 specific that I can point to. All the outreach wasn't
23 done by me personally. In some cases, I did talk to
24 people. But I don't have any real recollection of any
25 specific discussions, no.

1 Q. Well, at any time, did the people that were
2 doing the outreach, I assume under your supervision and
3 control, come to you and say, you know, there are not too
4 many generating stations that are going to be able to
5 offer into the RFP with the APS zone limitation?

6 A. No, we did not get any kind of feedback like
7 that.

8 Q. And at what point did you realize there may not
9 be that many generating plants in the APS zone that could
10 participate in this RFP?

11 A. We had nine potential assets submit pre-
12 qualifications, which indicates a significant level of
13 interest in the process. Nine, in my opinion, in my
14 experience is a pretty robust number.

15 Q. Nine for the 1,300-megawatts of generation?

16 A. There were nine facilities that submitted pre-
17 quals, physical facilities that submitted pre-
18 qualification, yes.

19 Q. Were any of those under 100-megawatts?

20 A. I don't recall.

21 Q. Wouldn't that be important to know?

22 A. No, because as I said before, there is the
23 potential for any of these sites to expand if they don't
24 meet the 100-megawatt threshold.

25 Q. I'm sorry, could you just say that again?

1 A. The facilities may have the ability to expand to
2 meet 100-megawatts if they don't meet the 100-megawatt
3 threshold currently. So no, I would not have been
4 concerned by that. And I don't know that any of the
5 facilities that submitted pre-qualification were, in
6 fact, under 100-megawatts.

7 Q. And similarly with projects under development
8 who reached out, somehow someone that works with you
9 contacted them as well?

10 CHAIRMAN:

11 Let's move on. You've beat that to
12 death. Seriously. That's almost the questions, you've
13 asked basically the same. So we're trying to move along.
14 That's all.

15 BY ATTORNEY ROBERTS:

16 Q. Returning to your opinion letter on page six.

17 A. Yes.

18 Q. Paragraph two. You say that CRA has no barriers
19 to responding to the RFP?

20 A. That's correct.

21 Q. Did you have any thoughts at all that the timing
22 of the pre-qualification bids was not opportune when the
23 RFP was released sometime on the 16th, Friday before the
24 Christmas weekend, due on the 23rd, the week before
25 Christmas --- the day before Christmas Eve?

1 A. I had no concerns about the timing of pre-
2 qualification. Pre-qualification requirements are fairly
3 straightforward. We eliminated that as six of the nine
4 bidders submitted, the physical bidders, physical asset
5 bidders submitted pre-qualification applications. And
6 was had nobody reached out to us and express any specific
7 concern about the deadline on a pre-qualification
8 application.

9 Q. But you're assuming that because it wasn't a
10 complicated pre-filed qualification application that it
11 wasn't a problem for bidders. What about the timing of
12 people just knowing about the RFP and when the pre-qual
13 documents were released? I mean, you testified that you
14 weren't able to contact Longview about this.

15 A. What I testified is that we reached out to the
16 people at Longview to the best of our capabilities. And
17 then Longview themselves, other folks at Longview were
18 able to reach out to us. They were aware of the process.

19 You know, based on my experience, it was a
20 pretty robust interest in RFP. None of the potential
21 applicants expressed any concern about the timeline or
22 the timing of the pre-qualification. The pre-
23 qualification documents themselves probably only take ---
24 would take an hour or two to fill out. You know, I
25 understand that it was launched near the Christmas

1 holiday. But we didn't get any feedback whatsoever that
2 that was any sort of concern or consideration or reason
3 not to participate.

4 Q. Would you think a barrier to the RFP might be
5 someone that submitted the pre-qual documents late?
6 Would that indicate that there might be a barrier if
7 someone who couldn't submit them on time?

8 A. I don't believe so, no. There were --- as Mr.
9 Ruberto testified yesterday, there were some folks that
10 learned about the RFP late and requested the ability to
11 submit pre-qualification at a later date. And we
12 accommodated those in order to, you know, create as much
13 competition as we possibly could.

14 Q. And who were those parties?

15 A. Off the top of my head, I'm not sure. I would
16 have to go back and check.

17 Q. Was AE Supply one?

18 A. No.

19 Q. So the scope of your engagement with MonPower,
20 was it --- and either or requested, or you can say both.
21 Was it to conduct an RFP for physical assets in an APS
22 zone or was it to determine what would be the lowest cost
23 option for MonPower to resolve its capacity deficit?

24 A. Our role was to design and implement an RFP
25 process, and recommend a winner. MonPower had the right

1 and the ability to reject that recommendation and accept
2 none of the bids. I wasn't involved in making the
3 recommendation as to what they should do. But to design
4 and execute an RFP, and evaluate the economics of those
5 bids, and present that information to MonPower.

6 Q. Why couldn't you just open the RFP to all
7 assets, including beyond the APS zone, and then consider
8 the location in evaluating the RFPs?

9 A. Sure. I mean, and this goes back to kind of
10 your design question you asked earlier and who makes what
11 decisions. Our role is to execute a process on behalf of
12 our clients that best identifies a facility that meets
13 their needs. And that's consistent with every RFP that
14 we've done.

15 You know, MonPower was in a position to decide
16 if --- given the debate and discussion around physical
17 assets versus PPA, they wanted to go with physical
18 assets. And I support that decision given how they
19 characterize the need. And similarly, I think yesterday
20 Mr. Ruberto talked at length about the APS end-zone
21 requirement and why it was done, and why that decision
22 was made. And I agree with that decision, so ---.

23 Q. Well, let me ask you this question. Did you
24 agree with Mr. Ruberto or did you independently verify
25 what he told you about his desire for APS zone

1 commissions?

2 A. I agree with Mr. Ruberto's analysis and
3 decision. You know, as an RP administrator on behalf of
4 our client, I don't think our role is necessarily to go
5 out and challenge the analysis that they've done
6 regarding the needs of the utility. I mean, it's the
7 utility's job to work on behalf of its ratepayers and
8 find the best asset, or decide on what the best asset is
9 to meet their need. My role is more around the RFP
10 process itself and making sure that we had enough
11 competition in the process to identify the best asset
12 reduced area.

13 Q. But you understand that the limitation to the
14 APS zone seriously limited who could bid into the RFP?

15 A. I think as I've said already, this RFP generated
16 a fair amount of interest. It was consistent with other
17 RFPs that I've exercised and done on behalf of utilities.
18 I had no concerns about the level of interest or
19 competition, or any restrictions that we had on the RFP.

20 Q. But that wasn't my question. My question was
21 didn't the inclusion of the APS zone limitation seriously
22 limit who could participate in the RFP?

23 A. It limited participation, but it limited
24 participation to the asset that best met my client's
25 need. And I think Mr. Ruberto talked at length, and I

1 thought it was very convincing, about why the APS zone
2 requirement was in place. And so I guess I can say it
3 this way. If you need to buy a pickup truck, looking at
4 sports cars, you know, they might add to the competition.
5 But if you need a pickup truck, you should buy a pickup
6 truck if that's what meets your needs.

7 Q. I apologize. I thought that was a yes or no
8 answer. So let me get back --- let's get back on track.
9 So the RFP provided that if there were no conforming
10 bids, you look at assets outside the APS zone. Right?

11 A. That's right.

12 Q. And how were you going to evaluate the assets
13 outside the APS zones?

14 A. We did not have a defined framework in place for
15 exactly how we would do that evaluation.

16 Q. Who would do that? I guess when you got no APS
17 zone bids that were conforming? Is that what would
18 happen?

19 A. We were confident based on the outreach and
20 communication we had with bidders along the way, that we
21 would have sufficient bids within the APS zone that we
22 would need to cross that bridge.

23 Q. Okay. Turn specifically to the analysis CRA
24 bid. Is it fair to characterize your analysis as a two-
25 step process? First, a dispatch analysis, which ABB

1 provided inputs for. Is that accurate so far?

2 A. It only gives you the two steps, so ---.

3 Q. Well, that's the first step. Is the first step
4 accurate?

5 A. The first step was to take ABB's price-point and
6 do a dispatch analysis, yes.

7 Q. And the second part was the financial analysis?

8 A. That's correct.

9 Q. And the dispatch was to determine the amount of
10 generation from each bid; correct?

11 A. It was to determine the market revenues for each
12 asset.

13 Q. The dispatch?

14 A. Yes.

15 Q. And the financial analysis was to determine the
16 net present value?

17 A. That's correct.

18 Q. And you designed these two methodologies, you
19 and the CRA?

20 A. I don't know that we designed it. I think it's
21 a fairly common approach.

22 Q. Whose idea, CRA's and MonPower's, was it to use
23 the ABB forecast regarding the energy cost, capacity
24 cost, and fuel prices?

25 A. The ABB forecast was provided by MonPower.

1 Q. Okay. And don't you have that information in
2 the modeling CRA does? Or don't you have the capability
3 of producing that information?

4 A. Are you asking if CRA is capable of doing an
5 independent forecast?

6 Q. Yes. So do you know why those forecasts were
7 provided by MonPower instead of CRA doing the forecast?

8 A. I think it's pretty common in our evaluation
9 work and RFP work that clients who come to us will
10 receive an internal forecast, a forecast from a third-
11 party, and sometimes they would like the CRA's output.
12 So we would have been capable to do it if MonPower asked
13 us to do it. But that was not part of the scope of our
14 work.

15 Q. And you understand, don't you, the issue about
16 which ABB forecast was used, the spring 2016 outlook and
17 the fall 2016 outlook?

18 A. I understand the issue, yes.

19 Q. Yes. So was it also MonPower who decided to use
20 the spring 2016 outlook?

21 A. Well, as far as I'm aware, there wasn't really a
22 decision one way or another about, oh, should we use this
23 or should we use that. When we started down the path of
24 doing the analysis and doing the engagement, the spring
25 2016 forecast was the current forecast. As is always the

1 case, these forecast agencies produce forecasts
2 periodically. I know oftentimes during the course of
3 engagements, a new forecast is produced. I wasn't really
4 aware of the timing of the updated forecast until we got
5 into the regulatory process.

6 Q. So you said when you started your engagement the
7 spring outlook was available, when did you start your
8 engagement?

9 A. I think the first contact I had with MonPower
10 was probably in October. But I believe MonPower
11 internally had started the process of getting ready to do
12 this prior to that. So when I talk about the engagement,
13 I'm talking about the whole timeline that CRA and
14 MonPower were in a situation with the RFP.

15 Q. But did you ask MonPower why they weren't using
16 the most recent outlook?

17 A. I did not, no.

18 Q. You didn't think that was important?

19 A. I wasn't really aware of the timing of when ABB
20 releases its forecast through the crosses. But I
21 wouldn't be concerned about that. You know, it's not
22 unusual that this happens. And when you start getting in
23 those motives of chasing the newest forecast, you can
24 never actually complete the analysis. Either ABB would
25 release the forecast and maybe EIA would release a new

1 forecast. You know, we still have to complete the whole
2 regulatory process. If ABB comes up with a new forecast,
3 what is this complete? Should we re-run the whole
4 analysis again? We use the forecast that was current at
5 the time this whole process started. And that's the
6 forecast we stuck with.

7 Q. But when you ran the analysis from this RFP, the
8 fall ABB forecast had been out for several months.

9 A. You know, I've already said before I'm not aware
10 of the timing of when those forecasts were released. But
11 I wouldn't have recommended necessarily a documented
12 forecast for a couple reasons. One, it takes some time
13 and effort to translate the forecast format into the
14 format that's used for modeling.

15 Q. About how much time?

16 A. I couldn't answer that question.

17 Q. Four months?

18 A. It would take less than four months. Typically,
19 the way these forecasts work, and I think Tom Sweet is
20 probably in a better position to talk about this, is the
21 longer-term fuel of supply and demand in energy markets
22 typically doesn't change a lot in a short period of time.
23 So the near-term forecast may change. But the longer
24 term may not. So in that sense, when you're doing an
25 analysis, it's --- you know, looking 15 years into the

1 future, it may not make that much of a difference. I
2 can't say in this case I didn't have the updated forecast
3 and I didn't do any kind of analysis on how to get what
4 that forecast was.

5 Q. So you can't say whether it would have made a
6 difference to use the most recent forecast for the
7 reasons you stated?

8 A. I didn't run the updated forecast for the
9 analysis or analyze these assets using the updated
10 forecast.

11 Q. MonPower gave you the spring forecast and that's
12 all?

13 A. MonPower gave me the forecast that was current
14 at the time that this process started. And that's what
15 we used throughout the process.

16 Q. And you've looked at the forecast; correct?

17 A. I have, yes.

18 Q. And it runs several sensitivity analyses of the
19 case assumptions?

20 A. Is that a question?

21 Q. Yes.

22 A. Yes.

23 Q. And yet, CRA chose to use a single input as
24 opposed to the ABB range and forecast; is that correct?

25 A. We did a base case analysis and then we followed

1 it.

2 Q. Okay. Can you explain the difference between a
3 model that dispatches against fixed energy prices, and
4 the model that dispatches against load?

5 A. Sure. A model that dispatches against load
6 takes a pre-determined load forecast. And it takes the
7 characteristics of the plant and the costs, and figures
8 out what the marginal unit would be to meet the need at
9 every hour. And from that model, electricity prices are
10 in output. Included in those types of models would be
11 natural gas prices, environmental considerations, and you
12 know, coal prices, all the commodity prices. And each
13 plant in the region would use the same model based on its
14 operating description.

15 The model we used for this engagement was a
16 simplified model. It's something we used in our
17 commercial activities for evaluation purposes for a lot
18 of clients in the utility sector. It takes a pre-
19 determined forecast of electricity prices and then
20 dispatches the unit based on its costs against those
21 prices. So given a price forecast, should this model,
22 should this unit based on its generated cost, should it
23 dispatch in a given hour or not. The other model that
24 maybe is a broader market model, starts with load and
25 figures out what the prices should be --- the electricity

1 prices should be.

2 Q. And the load model -

3 A. Yep.

4 Q. - also runs against other plants to determine
5 where Pleasants, for example, might come out in the
6 dispatch order and then what price it would be, the
7 output would be price data; is that right?

8 A. It would decide --- it would decide the market
9 price for electricity in the given hour, and whether the
10 unit is operating, yes.

11 Q. Yes, based on other units operating, too?

12 A. That's right.

13 Q. And considers the universe of generation plants,
14 not unlike the market; correct?

15 A. That's right.

16 Q. But yet, you chose a model that dispatched
17 against energy prices?

18 A. That's right.

19 Q. So isn't it fair to say, if you're off on the
20 energy price you're going to be totally off on the
21 dispatch --- whether it dispatches?

22 A. Any model can be off, including the load-based
23 models. If you're off on the natural gas price in the
24 load-based model, your electricity price is going to be
25 off. If you're off on the operating characteristics for

1 individual plants in the load-based model, your
2 electricity price is going to be off in that model. You
3 have --- in the load-based model, you have to make
4 assumptions about what new plants are going to be in
5 place in the market and when, and what the operating
6 characteristics of those plants are going to be. And
7 those are going to set prices. If you're off on any of
8 those factors, that other model will be off as well. Any
9 model can be off for any number of reasons.

10 Q. But if you dispatch against fixed energy prices,
11 one of the ways you compensate for the models being off
12 is you run scenario analyses; isn't that correct?

13 A. It depends on the client engagement. There are
14 times when we run scenario analyses, there are times we
15 do not.

16 Q. And did the client ask you not to run scenario
17 analyses?

18 A. No. In this case, I'm not sure we discussed
19 scenarios at length. I don't recall those discussions,
20 but I wouldn't have recommended doing a scenario analysis
21 in an RFP-type setting.

22 Q. If the asset compared favorably to the energy
23 price in your dispatch, did it essentially operate around
24 the clock, except for assumed maintenance and unforced
25 outage rates?

1 A. I'm sorry, can you repeat that question?

2 Q. Yes. Except for assumed maintenance and
3 unforced outage rates --- forced outage rates. I'm
4 sorry. Except for assumed maintenance and forced outage
5 rates, under your dispatch model, if the asset compared
6 favorably to the energy price, it essentially operated
7 around the clock; correct?

8 A. Well, the energy price is an hourly price. So
9 in hours where it's economic to run the facility, it will
10 run. In hours when it's not economic to run the
11 facility, it will not run subject to certain constraints
12 about minimum up and down time.

13 Q. And your model showed Pleasants operating
14 throughout the 15-year analysis period in an 83 percent
15 capacity factor?

16 A. Subject to check, that may be the average. I
17 believe that the modeling started at a lower capacity
18 factor, it rose to a point where it was operating in most
19 hours or at full output based on market conditions, yes.

20 Q. But it was an average capacity factor. So if it
21 started lower, it means at some point in your model
22 Pleasants had to have a capacity factor even greater than
23 83 percent?

24 A. Yeah. I'd have to check the numbers, but if it
25 starts --- if the average is, in fact, 83 percent and it

1 starts lower, then obviously it has to be higher later.

2 Q. That's just math; right?

3 A. Correct.

4 Q. Okay. So has --- did you look at the actual
5 capacity factor for Pleasants?

6 A. I didn't spend a lot of time looking at the
7 operating history of Pleasants, primarily because, you
8 know, the modeling output's a function of market
9 conditions. So the operating performance when market
10 conditions are different isn't particularly informative
11 of what the operating conditions should be, given the
12 outlook that's in place.

13 Q. So is it your testimony that it would've made no
14 difference to you if you knew that Pleasants had never
15 run at an 83 percent capacity factor?

16 A. I don't think it would've made a difference to
17 me in the sense that, you know, modeling is an imperfect
18 exercise. The inputs to the model were the operating
19 characteristics of Pleasants and what its capabilities
20 are. And given those capabilities and the market
21 conditions, the output is what it is.

22 Q. So despite the discrepancy in capacity factors,
23 CRA still stands behind its spreadsheet model as a
24 reasonable forecast?

25 A. I do, because I think the focus on capacity

1 factors is really misguided in this case. By focusing on
2 capacity factors, you're kind of implicitly assuming that
3 each hour has equal value in terms of the output. There
4 --- if you look at the 8760 hours of the modeling, and as
5 is typical as you would see in a marketplace, a lot of
6 the hours the facility is earning little or no margin.
7 There's only a small number of hours where it earns the
8 greatest return when market prices are high. If you were
9 to exclude those marginal hours, you should have a much
10 lower capacity factor and still yield almost the same
11 energy margin over the course of the year for the plant.
12 And I think that in my Rebuttal testimony it points to
13 that.

14 Q. Doesn't that ignore fixed cost?

15 A. No.

16 Q. Well, if an op --- if a unit's operating at 83
17 percent, then the fixed costs are spread over more
18 operating hours, more dispatch hours; aren't they?

19 A. The fixed costs are what they are. And those
20 fixed costs are included in the NPV analysis. If the op
21 --- if the facility operated zero hours, it would --- by
22 definition if it's a fixed cost, it would have the same
23 fixed costs one way or another. The fixed costs are
24 included in the NPV analysis. And the capacity factor,
25 in fact, has no bearing on the fixed costs whatsoever.

1 Q. Do you know what backcasting is?

2 A. Yes, I do.

3 Q. What is it?

4 A. It's the process of looking back and
5 benchmarking a model versus history.

6 Q. And would you comment on the backcasting you did
7 in this analysis to determine whether the analysis was
8 reasonable?

9 A. CRA didn't do backcasting in this, and typically
10 does not do backcasting on this sort of engagement that
11 I'm aware of. There may or may not have been extensive
12 backcasting done when the model was originally developed
13 years ago to ensure that it gets reasonable results. But
14 I wouldn't have been a part of that process.

15 Q. And did you ever consider comparing the 83
16 percent capacity factor to the results from a fully
17 functional dispatch model that CRA has?

18 A. We do not do that, no.

19 Q. All right. I want to show you a document that's
20 already been admitted. Is this it? It is CAG-SUN
21 Cross-4. And let me just --- let me ---.

22 ATTORNEY ROBERTS:

23 Do you have one for him? This?

24 ATTORNEY WHITE:

25 I only have one.

1 ATTORNEY ROBERTS:

2 That's all right. The witness needs
3 one.

4 ATTORNEY WHITE:

5 I only have that one.

6 ATTORNEY ROBERTS:

7 Only have this one. We have to share.

8 BY ATTORNEY ROBERTS:

9 Q. Well, let me ask you this, maybe I won't have to
10 show you this document. And the number I'm going to ask
11 you about is confidential, so I'm going to try --- I'm
12 hoping we can avoid saying the number out loud, and if
13 you feel like you have to say it out loud, then we need
14 to tell the Chairman.

15 Do you recall the average heat rate for
16 Pleasants that came out of your dispatch model?

17 A. I don't recall it specifically, but it was on
18 the order --- am I not supposed to say the -?

19 Q. Yeah.

20 A. Is this a number I'm not allowed to say?

21 A. No, you can't say the number.

22 Q. Okay. I do recall it generally.

23 A. It's in CAD Cross --- I mean, CAG-SUN Cross-4.
24 Where is it? The last two pages --- or it's on the ---
25 where is it? It starts on the next to the last page.

1 CHAIRMAN:

2 Do you have a copy of it?

3 ATTORNEY ROBERTS:

4 I'm sorry?

5 CHAIRMAN:

6 I'm asking the witness.

7 A. Yeah, I believe so.

8 ATTORNEY ROBERTS:

9 No.

10 A. This is what they gave me.

11 ATTORNEY ROBERTS:

12 Where is it? Oh, there it is. Okay.

13 BY ATTORNEY ROBERTS:

14 Q. So if you look at the next to the last --- last
15 page, line three.

16 A. This, page one of two? This page?

17 Q. This document. Yes, that's the next to the last
18 page.

19 A. Okay.

20 Q. Line three, you see what the average heat rate
21 was in your output?

22 A. I see that, yes.

23 Q. And what column is that in?

24 A. It starts in column E.

25 Q. And continues through?

1 A. Through K.

2 Q. Through K. All right. Do you know what the
3 average heat rate for Pleasants is?

4 A. I know what the heat rate has been in the past,
5 yes.

6 Q. And what is that?

7 A. Is that a confidential ---?

8 Q. That's not confidential.

9 A. I think it's on the order of \$10,300 and ---.

10 Q. Do you accept, subject to check, \$10,400?

11 A. Sure.

12 Q. Okay. If the heat rate is higher, does more
13 coal need to be burned to generate that same amount of
14 power?

15 A. Yes.

16 Q. So it's kind of counter intuitive, isn't it?
17 The higher the heat rate, the less efficient the coal, or
18 the more energy it takes to burn the coal.

19 A. Right. The higher the number it's the more
20 energy it's consuming to produce one megawatt hour of
21 output.

22 Q. Okay.

23 A. So higher number is a less efficient unit.

24 Q. Okay. Is it fair to say that higher capacity
25 factors will cause heat rates to be lower?

1 A. Yes.

2 Q. Where's this? Okay. I want to turn to the NVP
3 (sic) model. I want to turn to the NVP model, which is
4 in the same exhibit that you've been handed. And turn to
5 the next to the last page that we were just on. There's
6 a tab just below where we found the heat rate that says
7 Contract. Do you see Contract 1 --- and this is a
8 confidential document so please don't disclose any
9 details of what you see, just acknowledge whether you see
10 Contract 1.

11 A. I do see it, yes.

12 Q. Okay. Did you request a copy of this contract?

13 A. I don't recall. I'm not sure if I saw the
14 actual contract. I may have.

15 Q. Okay. Or you may have relied on the summary in
16 the Pleasants bin?

17 A. Yes, I may have. I don't recall.

18 Q. And what was the quantity of coal specified in
19 the Pleasants Contract summary?

20 A. I believe, based on what I'm seeing in front of
21 me now, is 15 --- or 1.5 million tons a year.

22 Q. And what was the quality of that coal?

23 A. It was, I think, northern --- I mean, you're
24 asking me to recall a -.

25 Q. BTUs.

1 A. Fairly low --- it was fair level of detail, but
2 it was Northern Appalachian Coal.

3 Q. And did you use 13,000 BTUs in your analysis?

4 A. 13,000 is what was used in the analysis, and
5 that was consistent with the coal that was --- the coal
6 specification used for the modeling provided by ABB.

7 Q. And did you --- how did you assure yourself that
8 that was an appropriate factor to use in your modeling?

9 A. The 13,000?

10 Q. Yes.

11 A. It's kind of a general benchmark for Northern
12 Appalachian coal.

13 Q. Did you look at the EIA Form 923 that shows the
14 Pleasants coal purchases monthly?

15 A. I did not look at that specifically, no.

16 Q. So you don't know whether Pleasants actually
17 burned that coal, or whether it was just in their
18 summary?

19 A. Or whether it was --- I'm sorry, I didn't hear.

20 Q. Just in their summary of the contract.

21 A. The 13,000 is not necessarily from the contract
22 summary, it's from the ABB forecast.

23 Q. Oh, so you don't actually look at the BTUs of
24 the coal in the model, you just accepted 1,300 --- 13,000
25 BTUs for your model?

1 A. The price forecast that was provided by ABB for
2 use in the modeling was consistent with a 13,000 BTU
3 coal.

4 Q. Okay.

5 A. The facility's capable of burning 13,000 BTU
6 coal.

7 Q. And so you were unaware then that it burned
8 12,600 BTU coal?

9 A. I'm certain that a coal plant like Pleasants
10 would burn a variety of BTU contents within a range.

11 Q. Did you check?

12 A. I did not check.

13 Q. And you knew that it would affect your forecast,
14 though, didn't you?

15 A. Well, the forecast was done on a dollar per
16 million BTU basis. So the BTU content of the coal is
17 somewhat less important in the primary part of the
18 analysis.

19 Q. But wouldn't using higher BTU coal in your
20 analysis understate the cost for coal, if the plant
21 actually burned lower BTU coal?

22 A. It may or may not. The lower BTU coal I expect
23 on a dollar per million BTU basis would be less valuable
24 and would cost less.

25 Q. And did you see Ms. Madean's testimony?

1 A. I did, yes.

2 Q. And did you see the discrepancy in dollars per
3 MM BTU of Coal Contract Number 1 versus the other coal
4 contracts in 2016?

5 A. I think she made an adjustment to the cost for
6 the difference in the BTU under the contract versus the
7 coal that was modeled, yes.

8 Q. Okay. What sulfur content did you assume in
9 your modeling?

10 A. I don't recall. Northern Appalachian coal is
11 generally fairly a high sulfur.

12 Q. And did you do any independent verification of
13 the market price for the Pleasants coal when you did the
14 analysis?

15 A. For the market price of the Pleasants coal?

16 Q. Yes.

17 A. No, the coal that we were using for the modeling
18 was the ABB price.

19 Q. Okay. So not the ---

20 A. ABB coal.

21 Q. --- Pleasants. Okay. One of the analyses you
22 did on a nonprice factor was to score West Virginia coal
23 sourcing.

24 A. That's correct.

25 Q. And did you know when you did your analysis that

1 Pleasants was using very little West Virginia Coal?

2 A. It's my understanding that the plant has started
3 to burn a greater percentage of West Virginia coal. It
4 has used West Virginia coal in the past.

5 Q. I'm sorry. How is that relevant to the modeling
6 that you did, that it's now burning more West Virginia
7 Coal?

8 A. I believe that's currently what is happening at
9 the plant, it is currently burning a greater percentage
10 of West Virginia coal than it had in the past.

11 Q. So why is that relevant but not the actual MM
12 BTUs of the coal you model, or any of the other factors,
13 like capacity factor, which the Pleasants plant has never
14 reached?

15 A. Because on the scoring the question was around
16 whether or not the plant has the capability to burn West
17 Virginia coal, and it was given points for that ability.
18 And I think it has demonstrated that it has done that in
19 the past. I know it's true it hasn't always burned
20 solely West Virginia coal, but it is capable of burning
21 West Virginia coal and that was the basis of the scoring.

22 Q. Did you accord Longview that same accommodation
23 when you analyzed their plant, that it could burn West
24 Virginia cola?

25 A. Longview has never burned any West Virginia

1 coal. It takes its coal via belt from a mine in
2 Pennsylvania. In the RFP document it states that if
3 there was an ability to change the source of the coal,
4 the bidder should include that in their bid. Longview
5 did not include any such language of the ability to
6 change the source of the coal.

7 So I think the difference in this case is that
8 Pleasants had a demonstrated capability of burning coal
9 from West Virginia, it continues to burn coal from West
10 Virginia, and Longview had never done that and has no
11 demonstrated capability.

12 Q. Your NPV analysis considers all the bids over 15
13 years; correct?

14 A. That's correct, it's a 15-year NPV.

15 Q. Why 15 years?

16 A. There's no real magic number for how many years
17 an NPV analysis should go. You know, I think it was
18 based on an assumption that we're trying to do modeling
19 over a period where we get kind of steady state in terms
20 of the output. I wouldn't recommend doing a real short-
21 time horizon on an NPV unless the client had a short-time
22 horizon for the investment window. We could've done
23 longer, but I don't think it would've added anything to
24 the NPV in this case --- NPV analysis in this case.

25 Q. But all things being equal, wouldn't a 15-year

1 NVP analysis favor Pleasants over Longview?

2 A. It may. I mean, going into this process we
3 didn't know what units were going to be bid into the
4 analysis, we didn't know what the nature of the bid would
5 be and how it'd be structured. And I really have no way
6 of knowing until you see the bid whether the period is
7 more favorable to one versus the other, and I don't
8 really know now if a longer NPV period would've helped
9 Longview versus Pleasants in the analysis.

10 Q. That's pretty remarkable. In your NVP analysis,
11 can you confirm that no cost related to the closing of
12 the Pleasants plants were considered?

13 A. We did not include shut down cost assumptions
14 for Pleasants. I think if you look at the modeling for
15 Pleasants, and you've talked about it yourself, the plant
16 is deeply in the money at the end of 15 years in the
17 analysis. It's operating at a high capacity factor.
18 There's no indication, and to be honest in my experience
19 no reason to believe, that a plant would shut down if
20 it's operating and making money like that.

21 Q. So when you say deeply in the money, that's
22 because the price forecast was high in your dispatch
23 analysis; correct?

24 A. I don't know I'd characterize it as high or low,
25 the price forecast was what it was.

1 Q. Well, I'm just using your words. I thought I
2 was using your words.

3 A. High for the price forecast?

4 Q. No. High --- you said it was in the money.

5 A. I said it was in the money, I thought you said
6 because of the high price forecast. That's where I was
7 taking issue.

8 Q. Okay. All right.

9 A. I don't know that the price forecast --- yes, it
10 was --- the Pleasants facility in my modeling, it was
11 deeply in the money at a high capacity factor, and it was
12 ---. You know, and that's, you know, why it generated
13 such a high NPV in the analysis, it's a profitable plant.

14 CHAIRMAN:

15 Deeply in the money being positive?

16 A. Yeah. Oh, yes. Sorry. Thank you. I don't
17 believe that an owner would shut a plant down that's
18 operating and making money like that.

19 BY ATTORNEY ROBERTS:

20 Q. So this is based on the price forecast in your
21 dispatch model, did you analyze gas prices in your
22 dispatch model, the effect of gas prices?

23 A. The effect of gas prices --- to be honest, in
24 the dispatch model the effect of gas prices would be very
25 little. I think we've talked about the dispatch model

1 for a coal plant, it takes into consideration electricity
2 price and coal prices.

3 Q. So your model does evaluate the correlation
4 between low gas prices and the likelihood of Pleasants
5 running?

6 A. That would've been implicit in the ABB forecast
7 and their modeling.

8 Q. Please confirm that your analysis included no
9 residual value for any of the assets in the conforming
10 bids at the end of the 15-year period?

11 A. That is true.

12 Q. And would that tend to benefit Pleasants or
13 Longview?

14 A. It depends how you go about doing ---
15 quantifying residual value. And it depends on the nature
16 of the asset at the --- at the end in the modeling.

17 Q. And Pleasants is a new plant; right --- I mean,
18 Longview is a new plant, is it not?

19 A. Longview is a newer plant, yes.

20 Q. So you would expect there to be some residual
21 value to Pleasants in 15 years --- I mean to Longview in
22 15 years?

23 A. I expect residual value to all three of the
24 plants at the end of 15 years.

25 Q. Please confirm that you included no capacity

1 replacement costs in your analysis for Pleasants.

2 A. I didn't specifically --- are you talking about
3 --- we didn't retire Pleasants in the analysis.

4 Q. Yes. Okay.

5 A. So there was no megawatts to replace.

6 Q. Please confirm that in your analysis you had no
7 costs related to the closure of McElroy Run.

8 A. That is true. We didn't include those costs in
9 the NPV that's included in the opinion letter. I did
10 take a look at what the effect of that would be on the
11 NPV analysis.

12 Q. When did you do this?

13 A. Excuse me?

14 Q. When did you do that?

15 A. At the time of the bids. We took a look at a
16 number of different factors. They weren't included in
17 the base case NPV analysis that we did, but we did take a
18 look at these costs. We used the costs for McElroy Run
19 shut down that was included in the Alleghany bid, and
20 it's subject to check, but I think it was --- this is not
21 confidential; right?

22 Q. No, it's not.

23 A. It's not confidential. Okay. It was about \$65
24 million, as I recall.

25 Q. What would you -?

1 A. It has very limited effect on the NPV results.

2 Q. Does \$45 million sound -?

3 A. \$45 million, sorry.

4 Q. Sound more correct? And is that in your
5 testimony anywhere?

6 A. No.

7 Q. And that's --- but yet you understand McElroy's
8 closing with --- according to the Company, within about
9 ten years?

10 A. I do. And the approach we took on the NPV was
11 to exclude costs that --- where the timing and magnitude
12 of the costs were speculative. And there's some
13 judgement in there. It was really unclear to me exactly
14 when that McElroy run cost would be incurred, and so we
15 did not include it in the NPV.

16 Q. Did you know that McElroy Run was a high-hazard
17 impoundment?

18 A. No, I did not.

19 Q. Did you know that it's the only West Virginia
20 high-hazard impoundment?

21 A. No.

22 Q. Did you independently evaluate the closure costs
23 AE Supply gave you for McElroy Run?

24 A. I did not.

25 Q. You're certainly aware of the Tennessee Valley

1 and Dukes Bills that resulted in billions of dollars of
2 damages and costs, are you not?

3 a. I'm aware, but that --- all of that is sort of
4 outside of the scope of what we were trying to do in the
5 RFP.

6 Q. And in the RN -.

7 A. FP.

8 Q. And that wasn't a risk that you thought was
9 worthy to consider in an RFP?

10 A. Well, I think the shutdown costs may have been,
11 and as I said, we did take a look at those. I think
12 you're talking about the nature --- the hazardous nature
13 of the facility and the risks, those kinds of things I
14 think really would be better suited to an engineer and an
15 engineering analysis of the facility itself.

16 Q. So I understand the difference between the
17 hazard costs and the closure costs.

18 A. Right.

19 Q. But you did nothing to verify the closure costs
20 of McElroy Run, you just accepted what AE Supply said it
21 would be?

22 A. I did accept that figure.

23 Q. You're aware, aren't you, that ratepayers don't
24 want to assume any liability from the closure costs or a
25 potential spill from McElroy Run?

1 A. I certainly understand that, yes.

2 Q. And would it be fair to say a way to protect
3 ratepayers against that would be to have First Energy
4 Corporation indemnify MonPower against any closure costs
5 above the \$45 million?

6 A. I don't think that's really in the scope of my
7 analysis or expertise, to be honest.

8 Q. How old will Pleasants be in 20 years?

9 A. I think the plant is about 40 years old right
10 now, so in 20 years it'd be 60.

11 Q. Are you 100 percent confident that it'll be
12 operating in 20 years?

13 A. If the plant is in the money, I am 100 percent
14 confident it will be operating in 20 years, yes.

15 Q. Well, are you 100 percent confident that it will
16 be able to be operating in the money for the next 20
17 years?

18 A. I don't see any reason why it shouldn't be.

19 Q. Are you familiar with Hatfield's Ferry?

20 A. I'm generally aware of the facility, yep.

21 Q. And you realize it was closed at 43 years of
22 age?

23 A. Yes, I know that Hatfield's closed.

24 Q. And do you know what kind of generating
25 equipment it had?

1 A. I do not.

2 Q. Are there any scenarios you could imagine that
3 would result in Pleasants being closed in the next 20
4 years?

5 A. Are there any scenarios where it could be
6 closed? I think the scenarios at any plant could be
7 closed in the next 20 years.

8 Q. Huh? Such as?

9 A. You know, if there's breakthroughs in new
10 technology. There's any number of things that could
11 cause a plant to close, and that's any plant.

12 Q. So lower gas prices?

13 A. Yes, and a gas plant may close due to high gas
14 prices.

15 Q. But a coal plant could close due to low gas
16 prices?

17 A. It could, yeah.

18 Q. And how about low energy prices, could that
19 cause a gas --- a coal plant to close?

20 A. It might, depends on the capacity markets.

21 Q. Well, how about lower capacity prices, could
22 that cause a coal plant -?

23 A. It could, it depends on the energy markets.

24 Q. If the energy and capacity prices together were
25 lower, could that cause -?

1 A. Probably, but they usually move in opposite
2 directions.

3 Q. Okay. If the Stan Affluent Limitation
4 Guidelines is lifted, could that cause a coal plant to be
5 closed?

6 A. Based on the magnitude of the costs that I've
7 seen for ELG at Pleasants, I don't think that sort of a
8 cost is going to make it shut down. No.

9 Q. How about new regulations on coal plants that we
10 haven't even thought of yet?

11 A. You know, if it could be anything, there could
12 be things to cause a plant to shut down, if we're talking
13 about, you know, hypothetical environmental regulations.
14 But my experience is environmental regulations typically
15 don't change all that quickly. You know, I think we can
16 go back to hearings I was in in West Virginia in the mid-
17 '90s when people started talking about the risk of CO2,
18 and here we are 2017 and that has not happened. These
19 things don't typically move with that great a pace.

20 Q. Could lower load growth affect whether a coal
21 plant closes?

22 A. I think, you know, under the scenario we
23 modeled, lower load growth is not a tremendous risk for
24 the plant because it's a base load plant operating at a
25 high capacity factor. I think lower load growth would be

1 a greater risk for an intermediate resource like a
2 combined cycle.

3 Q. Well, but if the Company is projecting load
4 growth in the neighborhood of 2.5 percent and the load
5 growth doesn't materialize, that affects the economics of
6 the plant and whether it can run?

7 A. I don't know that it affects the economics of
8 the plant, it might affect the economics of the owner of
9 the plant.

10 Q. Let me restraight --- let me restate that. I
11 stated that inartfully. It affects whether the plant
12 needs to run if there's lower load growth, and then the
13 fact that it's running less affects the economics of the
14 plant. You'd agree with that, wouldn't you?

15 A. Not necessarily. A base load plant at lower
16 load growth may continue to operate in a baseload mode.

17 Q. Let's talk about baseload plants for a minute.
18 Have you noticed there's been a fundamental change in the
19 generation market in the last four or five years?

20 A. Certainly gas prices have been low and that's
21 changed the dynamics of the natural gas market ---

22 Q. In fact, it's changed ---

23 A. --- power market.

24 Q. --- the dynamics in the markets, hasn't it, so
25 that natural gas is now displacing coal in the dispatch

1 order?

2 A. That's true, I mean, but I think the question is
3 whether or not you believe that these conditions are
4 going to persist or if they're temporary. And I think
5 history has shown us that market conditions in natural
6 gas markets are particularly volatile. I think there's
7 an awful lot of upside risk to prices given where prices
8 are now. And I don't think there's necessarily a reason
9 to say, you know, gee, just because natural gas price has
10 been low for the last few years that means it's going to
11 be that way forever.

12 Q. But aren't the low gas prices of the next few
13 years a result of a fundamental shift in the United State
14 energy market with the shale price?

15 A. First of all, I'd say natural gas prices have
16 already started to firm up. And I think as Mr. Roberto
17 talked about yesterday they're up substantially even just
18 since last year.

19 Q. Substantially meaning what?

20 A. I think they've gone from ---

21 Q. From what to what?

22 A. --- \$2 to \$3.

23 Q. Oh, \$2 to \$3. Okay.

24 A. Yeah. But that's ---.

25 Q. That is an increase. They're still low.

1 A. You know, when I started energy consulting, we
2 were in this through the midst of a natural gas bubble.

3 Q. When was that?

4 A. That would've been in the mid-90s. Natural gas
5 prices were about --- I think they were below \$2 a
6 million BTU, but that's going from memory. And at the
7 time, some of the forecasts started projecting that
8 natural gas prices would, you know, get to \$3 and
9 everybody said it was crazy and it could never happen.
10 You know, by, you know, five years down the line they
11 were at \$11 a million BTU.

12 You know, one of the mistakes I think people
13 always make in this industry as I've seen it is they
14 assume current conditions are going to last forever, and
15 that just isn't how it works. Natural gas prices are low
16 right now because of shale technology, and that's created
17 a lot more low-cost supply. But you're going to start to
18 see new combined cycle plants coming on, you're going to
19 start to see industrial applications for natural gas and
20 demand is going to catch up. And you know, I think it's
21 --- it would be unwise to assume that recent or current
22 market conditions are going to persist forever.

23 Q. You know what PJM is, don't you?

24 A. Yes, I do.

25 Q. And do you know what their opinion is on whether

1 gas prices are going to remain low in the new term?

2 A. I do not.

3 Q. Don't you think that's an important thing for
4 you to know?

5 A. I think that there's a lot of different outlooks
6 on the natural gas market. The natural gas market's
7 pretty complicated, it isn't just isolated to PJM and
8 electric utilities. I think the largest use of natural
9 gas in the United States is for space heating. I don't
10 think that's inside of --- I wouldn't call that within
11 PJM's area of expertise. So I do think that PJM's, you
12 know, outlook is valuable, but I think ABB's outlook is
13 valuable, the IA's outlook is valuable.

14 Q. So are you comparing the ABB ---?

15 CHAIRMAN:

16 Stop, the witness was still speaking.
17 Go ahead, finish your answer.

18 A. I think any number of outlooks are valuable.

19 BY ATTORNEY ROBERTS:

20 Q. So you're equating the ABB outlook with the PJM
21 outlook, like it's just another outlook?

22 A. I am.

23 Q. You are? And yet PJM is responsible for the
24 reliability of the grid and its footprint. Doesn't that
25 make a little bit of a difference?

1 A. No, I think ABB does a good job in their
2 forecast. I think that their reputation is on the line
3 every time they put together a forecast. And I think
4 natural gas prices are a difficult thing to forecast.
5 I'm not being critical of PJM's outlook. I'm just saying
6 it's a very complex market.

7 Q. It's unbelievable. Well, if gas prices are so
8 uncertain and other factors, why didn't you do some
9 scenario analyses in your evaluation?

10 A. Sure. One of the -.

11 Q. Wouldn't that have helped address the potential
12 risks?

13 A. One of the problems that you have in an RFP-type
14 environment when you're considering NPV is how to use the
15 NPV number. So if we had done --- we had three
16 conforming bids, we had two nonconforming bids. If we
17 had done, say, three different scenarios, that would give
18 us nine different NPV values for the three conforming
19 bids and another six NPV values for the nonconforming
20 bids. Then you're left with, okay, well, how do I choose
21 which NPV is the right NPV because one facility may be
22 better under one scenario, another facility may be better
23 under another scenario.

24 Typically, what people will do in those cases is
25 average the NPVs, you know, to give you sort of a

1 composite. But then you're back to something that looks
2 an awful lot like your base case. So I think if you're
3 confident in the base case scenario you have and you
4 understand certain risks, then a base case alone is
5 sufficient.

6 Q. Were you aware that Longview has gas cofiring
7 capability?

8 A. Yes, I'm aware of that.

9 Q. And what is gas cofiring?

10 A. You blend in natural gas to the burn of the
11 coal.

12 Q. Did you have any follow-up to questions to
13 Longview about the cofiring capability of Longview?

14 A. I don't recall our discussions in that level of
15 detail, no.

16 Q. Well, how long was your conversation with them?

17 A. It was probably about an hour, but it was some
18 time ago.

19 Q. Do you believe that, given the uncertainty
20 you've described in gas prices and fuel prices, that
21 being able to cofire with gas capability is an asset?

22 A. I believe it's an asset, certainly. But under
23 the forecast and the scenario we used, it was something
24 that had very little value.

25 Q. So you ---.

1 A. They were more economic using coal than gas.

2 Q. Did you evaluate that in your analysis?

3 A. Our evaluation was based on the base case
4 analysis, and in the base case analysis the cofiring had
5 little or no value.

6 Q. Okay. Speaking --- turning to the non-price
7 categories of your analysis, how were these non-price
8 categories established?

9 A. You know, it was like with the rest of the RFP
10 launch. I mean, it was sort of a collaborative
11 discussion between MonPower and CRA.

12 Q. And we've already talked about the non-price
13 categories that relates to in-state benefits; correct?

14 A. In-state fuel benefits.

15 Q. In-state fuel benefits.

16 A. Yes.

17 Q. We've talked --- we've --- I've already asked
18 you questions about that.

19 A. Yes.

20 Q. Do you have any reason to believe that the coal
21 sourced by Pleasants was not the least cost?

22 A. I've no reason to believe that, no.

23 Q. And CRA awarded Pleasants almost a perfect score
24 on in-state fuel criteria; correct?

25 A. Yes. I think we've talked about the reasons for

1 that already.

2 Q. And we've already discussed that you didn't
3 independently evaluate whether coal --- West Virginia
4 coal was being burned; correct?

5 A. I did evaluate whether West Virginia coal has
6 been burned.

7 Q. Historically?

8 A. Yes.

9 Q. And it wasn't, was it?

10 A. At Pleasants? West Virginia coal has been
11 burned at Pleasants.

12 Q. Very little West Virginia coal has been burned
13 at Pleasants, wouldn't that be more accurate?

14 A. I think that you're probably referring to Ms.
15 Madean's chart. I think subject ---.

16 Q. Probably.

17 A. Subject to check, I think there may be a couple
18 mines that were mislabeled in the EIA data. We took a
19 look at energy velocity data in those --- and they had
20 classified mines both as EIA method and their internal
21 method. That's sort of neither here nor there because I
22 think the truth is Pleasants has historically burned coal
23 from West Virginia in all years. I think they've
24 increased the amount of coal currently that they're
25 burning from West Virginia. And I think the economics of

1 the coal that they have burned from Ohio is very similar
2 to the coal --- the economics of the coal from West
3 Virginia. The mines are very close together.

4 Q. Well that --- how did you confirm that, that the
5 economics of the coal from West Virginia ---

6 A. Well, that's just based on ---

7 Q. --- Ohio were very similar?

8 A. --- some past experience I have. You know, I
9 know the location of the mines, I looked at the location
10 of the mines.

11 Q. But if you looked at Contract Number 1, you
12 would know that's not true.

13 A. I'm talking about --- first of all, the Contract
14 Number 1 only goes for another two or three years.

15 Q. But it's ---

16 A. And then it expires.

17 Q. --- 4.5 million tons; isn't it? But it's 4.5
18 million ---.

19 A. Over three years. 1.5 million tons a year for
20 three years.

21 Q. Yes.

22 A. It was a 15-year NPV and the analysis was
23 supposed to reflect not just the current market
24 conditions and current choices of the plant, but over the
25 full period. And I think the --- you know, I think I've

1 already answered this, but the score was given to the
2 plant based on its ability to source coal from West
3 Virginia. And it has the ability and it has demonstrated
4 that and continues to burn coal from West Virginia.

5 Q. And if you were to learn that it couldn't
6 recover the costs of the --- all of the costs for the
7 West Virginia coal because it wasn't economic compared to
8 other sources, would that affect your analysis of how the
9 company could or could not comply with the in-state fuel
10 requirements?

11 A. You know, if --- are you talking about in
12 hindsight it may turn out that they don't burn ---?

13 Q. No, I'm talking about in the future. Let me
14 restate the question.

15 A. Assuming --- okay.

16 Q. Let me restate the question.

17 A. Okay.

18 Q. In the future Pleasants is owned by MonPower,
19 MonPower burns West Virginia coal. It's above-market
20 coal and ratepayers say we don't want to pay for above-
21 market coal. You can buy from Ohio cheaper.

22 A. So, you know, that's ---.

23 CHAIRMAN:

24 Is that the question? Is that a
25 question?

1 ATTORNEY ROBERTS:

2 Yes, yes. That was an explanation of
3 my questions.

4 A. So you're talking about a hypothetical scenario
5 where they buy West Virginia coal, it turns out West
6 Virginia coal is not competitive with Ohio or
7 Pennsylvania coal, and then ---

8 BY ATTORNEY ROBERTS:

9 Q. Yes.

10 A. --- there's an issue on cost recovery. That was
11 not part of my analysis. My analysis was taking the
12 forecast that we have, assuming that they are burning
13 this coal that is West Virginia coal for which they get
14 credit, and examining the economics of the facility under
15 that.

16 Q. If the Pleasants transaction proceeds, over 95
17 percent of MonPower's capacity will come from old coal-
18 fired plants. Did you consider the risks --- in your
19 analysis, did you consider the risks associated with
20 having virtually all of MonPower's generation in coal-
21 fired plants with similar vintages?

22 A. That wasn't part of the scope of what we were
23 trying to do. We were trying to look at the economics of
24 the individual plants, not the portfolio.

25 Q. But when you were consulting with MonPower up

1 front on how the RFP was going to be structured, ---

2 A. Uh-huh (yes).

3 Q. --- did you discuss this?

4 A. I don't recall this discussion coming up, but I
5 think I would've recommended we proceed with the RFP as
6 it was designed. I think what you'd have to suggest then
7 is to give some sort of preference for non-coal
8 facilities or some penalty on coal facilities.

9 Q. That's correct, but you didn't do that; did you?

10 A. We did not do that, no.

11 Q. If MonPower purchases 1,300 in megawatts from
12 Pleasants, based on all your analyses and your forecast,
13 would that effectively eliminate the opportunity for
14 MonPower to pursue new strategies for meeting its load,
15 such as gas, renewables, other ways?

16 A. Well, I mean, if they buy the 1,300 megawatts
17 from Pleasants, they don't need the 1,300 megawatts going
18 forward. If there is a need for additional megawatts,
19 you know, they may pursue a different strategy at that
20 point.

21 Q. But they wouldn't have the opportunity to pursue
22 a different strategy until they need the capacity again.

23 A. Right.

24 Q. Is that fair?

25 A. I think that's fair.

1 Q. Okay. Finally, that's just for the Chairman so
2 he'll be happy I'm finishing.

3 CHAIRMAN:

4 He didn't laugh.

5 ATTORNEY ROBERTS:

6 I know. Oh, I could go on.

7 CHAIRMAN:

8 No, you can't.

9 BY ATTORNEY ROBERTS:

10 Q. What other engagements does CRA have with First
11 Energy or its affiliates?

12 A. So the ones that I'm aware of, we do default
13 service procurement for First Energy's Ohio affiliates
14 and their Pennsylvania affiliates. There may be others,
15 others that CRA are involved in that I'm not aware of.
16 But those are the primary ones that I know of.

17 Q. And how often do the default service
18 procurements occur?

19 A. In Ohio there are two per year, and in
20 Pennsylvania we do four a year. And then in Ohio there's
21 some RFPs for low income customers as well, that's under
22 the same umbrella, but they're conducted once a year, I
23 believe.

24 Q. And those projects are done by engagement letter
25 with First Energy?

1 A. By engagement letter. We have contracts for
2 each of those ---

3 Q. Contracts.

4 A. --- projects. Separate contracts, yeah.

5 Q. And what is the contract value annually of the
6 Ohio and Pennsylvania default service auction work?

7 A. It's a significant number. I don't know the
8 number off the top of my head.

9 Q. What is the order of magnitude?

10 A. Millions, probably.

11 Q. Millions?

12 A. Yes.

13 Q. Are you currently engaged with --- in any other
14 projects? You thought you didn't recall, but -.

15 A. I personally am not other than, you know, this
16 current engagement in the Ohio and Pennsylvania CRA.
17 There may be others at CRA, it's a fairly big company. I
18 may not be aware of some of the other things that might
19 be going on.

20 Q. And you were aware, weren't you, when you took
21 this engagement that First Energy wanted Pleasants to be
22 acquired by MonPower?

23 A. I mean, that's probably going a little further.
24 I mean, I knew that there was interest in moving it. I
25 mean, you know, I knew they were going to bid.

1 Q. I want to show you a document. This is a
2 document that was admitted yesterday, and it is
3 identified as CAD-1.

4 A. Thanks.

5 Q. If you turn to the second page, Mr. Lee.

6 A. Are these the same doc --- you gave me two
7 copies.

8 Q. Oh, they should be the same.

9 A. Okay. So I'm sorry, so where should I turn?

10 Q. Turn to page two. You see about halfway down
11 the page it says Charles E. Jones, President, Chief
12 Executive Officer and Director?

13 A. Yes.

14 Q. About halfway down that paragraph, the rest of
15 the paragraph starts with a sentence that says we filed.
16 Can you read that into the record, please?

17 A. We filed our integrated resource plan with West
18 Virginia. I think later this year they'll start taking a
19 look at it seriously, and it's up to the West Virginia
20 Commission to decide would Pleasants be the appropriate
21 solution.

22 Q. And the last sentence.

23 A. Oh. Obviously, we have a model in place ---
24 already in place with Harrison and we think that is
25 something they ought to look at.

1 Q. So you ---.

2 CHAIRMAN:

3 The document speaks for itself. That's
4 the second time we've had that read into the record, and
5 we have the document in the record. That makes three
6 times.

7 ATTORNEY ROBERTS:

8 It is.

9 CHAIRMAN:

10 Move along, please.

11 ATTORNEY ROBERTS:

12 And it impugns his credibility on what
13 he knew when.

14 A. But you asked what I knew, and I hadn't seen
15 this.

16 BY ATTORNEY ROBERTS:

17 Q. What CRA knew and what you knew.

18 A. I don't know what CRA knew. I mean, I --- okay.

19 Q. Since your prior work has been for First Energy,
20 and your current work is for First Energy, and your
21 future work is likely to be also with First Energy, do
22 you appreciate the inherent conflict of interest you have
23 doing this work for MonPower?

24 A. No, I don't think there's a conflict. We have a
25 scope in the other projects to conduct processes to get

1 low default service rates for Ohio customers, similarly
2 we have a scope in place to get low default service rates
3 for Pennsylvania customers. I was hired in this case to
4 try to find the best asset to meet MonPower's needs. No,
5 I don't think there's a conflict. No.

6 ATTORNEY ROBERTS:

7 I have no further questions.

8 CHAIRMAN:

9 All right. It's 10:25, we'll take a
10 break until 10:40, 15 minutes.

11 SHORT BREAK TAKEN

12 CHAIRMAN:

13 We're back on the record and resuming
14 our hearing. Next, I guess is --- is it Michael?

15 ATTORNEY SOULES:

16 Yep. Thank you, Your Honor.

17 CROSS EXAMINATION

18 BY ATTORNEY SOULES:

19 Q. Good morning, Mr. Lee. My name is Michael
20 Soules and I represent West Virginia SUN and West
21 Virginia Citizen Action Group in this case.

22 A. Good morning.

23 Q. How are you?

24 A. I'm good, thanks.

25 Q. Good. And I apologize in advance, I'm going to

1 jump around quite a bit just because a lot of my
2 questions were covered by CAD in your discussion earlier.

3 A. Okay.

4 Q. Earlier you were talking with Ms. Roberts about
5 the 28 generation facilities that CRA contacted at the
6 outset of the RFP process.

7 A. That's right.

8 Q. And 16 of those 28 facilities have a nameplate
9 capacity under 100 megawatts; correct?

10 A. Subject to check, I could believe that's true,
11 though.

12 Q. Okay. And the bids that are submit --- that
13 were submitted through the RFP, that could be submitted
14 through the RFP, were done in terms of UCAP not installed
15 capacity; is that correct?

16 A. I believe so, yeah.

17 Q. Okay. And UCAP is lower than installed
18 capacities?

19 A. Yes.

20 Q. Great. Okay. Thank you. Earlier you spoke
21 with Ms. Roberts a bit about the NPV calculation, I
22 guess, at length. That calculation relied upon energy
23 capacity, gas and coal price forecast from ABB; correct?

24 A. Among other things, yes.

25 Q. Right. And those were from the spring 2016

1 reference case?

2 A. That's correct.

3 Q. Okay. And CRA did not use any other price
4 forecast data for purposes of the NPV calculation;
5 correct?

6 A. We didn't use any other forecast, no. I'd have
7 to check because I think certain items were overridden
8 for --- for example, capacity. I think the actuals for
9 capacity were chosen when there were actuals. And
10 subject to check, but there may have been a part of the
11 gas forecast that was used --- that we used forwards.

12 Q. Like for the ---?

13 A. The near-term, yeah.

14 Q. Okay. But the only forecast --- the only
15 fundamentals-based forecast as maybe Mr. Sweet would say
16 that was used for purposes of the NPV were the spring
17 2016?

18 A. That's right. That's true.

19 Q. Great. Okay. And in the NPV calculation that
20 you performed for the Pleasants plant, the largest ---
21 without getting into specific numbers, the largest
22 revenue stream projected were for energy revenues;
23 correct?

24 A. Sure, yes.

25 Q. And I know you spoke with Ms. Roberts a bit

1 about this earlier. But just at a high level, the
2 dispatch model that informed the NPV calculation would,
3 quote, unquote, dispatch whenever the assumed market
4 price was higher than the variable cost of the plant?

5 A. Subject to certain minimum up and down time
6 restrictions that the plant might have. So, you know, if
7 there was one hour where the plant were economic and,
8 let's say, a five hour minimum up and down time, if there
9 was one hour it was going to be in the money and four
10 hours where it was not going to be in the money, it would
11 not dispatch in that one hour.

12 Q. Okay. But for the MP --- or for the dispatch
13 model that you ran for Pleasants, those minimum up and
14 down times would not have come into effect because the
15 model assumed that starting in 2019 Pleasants would
16 always be economic to operate; correct?

17 A. I'd have to check the hourlies. So again, the
18 way it would work is it would sort of optimize over that.
19 So if there was an hour --- so let's go back to the
20 analogy where it --- or the example where it was a five
21 hour minimum up time. If it would've been in the money
22 for four of the five hours, it might prefer to lose money
23 in the one hour and --- because it will offset that more
24 when it's up in the other hours. I believe there were
25 cases when that was --- did come into play. And in those

1 cases it would --- the model would operate the unit at
2 the minimum load level to --- so it would lose the fewest
3 amount --- the fewest dollars in that one hour. But I
4 think because there were relatively few hours like that,
5 that it would typically operate at a loss in those hours.

6 Q. Okay. So the model assumed that --- the model
7 that you ran for Pleasants assumed that it is always
8 economic to have Pleasants in operation starting in 2019;
9 correct?

10 A. I believe that's the case, yes.

11 Q. Okay. And other than the D-rates that were used
12 to account for plant afforded outages, the model assumes
13 that Pleasants will run continuously from 2019 to 2032;
14 correct?

15 A. I'd have to --- again, I'd have to go back and
16 check the hourlies, but I believe that's essentially
17 true. Yes.

18 Q. Okay. If everything else had been held equal,
19 but you had used a lower energy price forecast in the
20 dispatch model, the model would've projected that
21 Pleasants would dispatch less frequently. Is that
22 correct?

23 A. That's likely. I mean, it depends how much less
24 it is. But yes, that's likely.

25 Q. Okay. Would you agree that the price forecast

1 that was used in the dispatch model can have a
2 significant impact on a power --- on Pleasants projected
3 energy revenues?

4 A. I mean, certainly the NPV is a function of the
5 inputs to it.

6 Q. Okay. CRA's scope of work, for purposes of this
7 proceeding, did not include a detailed review of the ABB
8 price forecast; correct?

9 A. That's correct. And typically, that would not
10 be part of our scope. So that would --- this was not
11 unusual, in that sense.

12 Q. Okay. And to the best of your knowledge, no CRA
13 employee has ever performed a formal evaluation of the
14 reasonableness and accuracy of any ABB price forecast;
15 correct?

16 A. To the best of my knowledge, no, nobody has.

17 Q. Okay. So there --- you had a discussion with
18 Ms. Roberts earlier about the assumed capacity factors.

19 A. Yes.

20 Q. Yeah. So just so it's clear, the reason that
21 the projected capacity factor for the years 2019 to 2032
22 is higher than Pleasants historical capacity factor is
23 because the ABB energy price forecast used in the model
24 assumed higher energy prices in the coming years. Is
25 that correct?

1 A. That's correct. I mean, the inputs to the model
2 are the operating capabilities of the facility. And then
3 subject to the economics it'll dispatch and try to
4 optimize and earn as much money as it can, so ---.

5 Q. And nothing in the model or the NPV calculation
6 takes account of the historical performance of Pleasants,
7 in terms of how frequently it dispatched; correct?

8 A. Can you say the first part? I missed one word
9 there.

10 Q. Yeah. The NPV calculation and the dispatch
11 model do not factor in, in any way, Pleasants' historical
12 performance; correct?

13 A. Only to the extent that the inputs of the model
14 are based --- as I told you before, the model respects
15 the physical capabilities of the plant, and those are
16 based on history.

17 Q. Okay. But other than the physical attributes
18 of the plant, the frequency of the dispatch --- of its
19 historic dispatch had -

20 A. Right.

21 Q. - no effect?

22 A. Right.

23 Q. Okay. Could you please turn to page 27 of your
24 Rebuttal testimony?

25 A. Sure.

1 Q. And I want to draw your attention to the latter
2 part of this page ---.

3 A. Hold on, I'm not quite there yet.

4 Q. Oh, I apologize.

5 A. It's all right. Okay. I have it.

6 Q. On this page and in the figure three on the
7 following page, ---

8 A. Yes.

9 Q. --- you point out that eliminating 20 percent of
10 the dispatch hours for Pleasants would reduce energy
11 margins by a very small amount; correct?

12 A. That's correct.

13 Q. Okay. And the calculation, that's reflected in
14 figure three, was developed using the ABB forecast that
15 you used in the model; correct?

16 A. I think figure three --- well, it's really from
17 the dispatch modeling, not the ABB forecast per se.

18 Q. Okay.

19 A. But it's --- the dispatch modeling's based on
20 the ABB forecast.

21 Q. Right. The forecast is an input in the dispatch
22 model.

23 A. Right. And then --- yes.

24 Q. Right. Okay. And in developing this figure,
25 you took the dispatch model results and removed the

1 bottom 20 percent of hours; is that correct?

2 A. I think this figure is all the hours. Okay.
3 And it's showing the margins, and the margins are very
4 low for a great number of the hours. And then the
5 statement that's on the figure is based on, okay, well,
6 if we reduce --- if I eliminate these hours, you know,
7 how much is the margin change.

8 Q. Okay.

9 A. Does that make sense?

10 Q. Yes, I follow you. Yep, thank you. And for the
11 underlying calculations that are reflected in this
12 figure, you did not rerun the dispatch model using a
13 lower set of energy prices; correct?

14 A. No. No, I did not

15 Q. Okay. Top of page 27, you note, starting on
16 line three, that plants in organized markets tend to earn
17 a large portion of their energy market profits during a
18 relatively small number of high-priced hours. Given that
19 a large portion of energy revenues are earned during
20 high-priced hours, that means that the on-peak prices are
21 generally a larger contributor to a plant's profitability
22 than off-peak prices; correct?

23 A. Correct.

24 Q. And in the CRA dispatch model, the forecasted
25 on-peak prices have a greater impact on energy revenues

1 than off-peak prices; correct?

2 A. Depends on the number of hours that are peak
3 versus off peak. And sitting here I'm not sure exactly,
4 out of the 24 hours in a day, how many are peak versus
5 off peak. Right. So for a given hour, certainly the on
6 peak is where you earn your money.

7 Q. Okay. Mr. Lee, do you still have CAG-SUN Cross
8 Exhibit 4 in front of you?

9 ATTORNEY SOULES:

10 Huh? What?

11 ATTORNEY WHITE:

12 He does not.

13 ATTORNEY SOULES:

14 Oh. Permission to approach, Your
15 Honor. I can --- yeah.

16 BY ATTORNEY SOULES:

17 Q. Mr. Lee, I just handed you a copy of the
18 attachment associated with CAG-SUN Cross Exhibit 4. Do
19 you recognize that document?

20 A. I do, yes.

21 Q. And that's the NPV calculation?

22 A. Correct.

23 Q. Okay. If you could look at the first page of
24 the attachment, and I will not --- this is confidential,
25 so no numbers. We'll just speak directionally. But row

1 20 on that page shows the UCAP that was assumed to clear
2 for Pleasants, for each year of the 15-year NPV period;
3 correct?

4 A. Correct.

5 Q And would you agree with me that for the --- are
6 you aware of the actual number of megawatts it cleared
7 for Pleasants in the 2020-2021 delivery year?

8 A. For 2021, no, I'm not.

9 Q. Are you aware of the number of megawatts it
10 cleared for 2019-2020?

11 A. I have some in front of me, here, if I can find
12 it. Okay. Yes, I do have that.

13 Q. And the number of megawatts it actually cleared
14 is lower; correct?

15 A. That's true, yes.

16 Q. Are you aware of the number of the megawatts it
17 cleared for 2018-2019?

18 A. Yes.

19 Q. And that's also lower; correct?

20 A. It is, yes. Not substantially lower, but it's
21 lower.

22 Q. Okay. So for the first couple years of the NPV
23 calculation, would you agree with me that CRA assumed a
24 higher number of megawatts would clear than actually
25 cleared?

1 A. I would agree, yes.

2 Q. Okay. Going further back, there's another sheet
3 that has a heading that says Capacity Price. It's maybe
4 the fourth page from the end of the document.

5 A. Is it before or after the dispatch results?

6 Q. It's after.

7 A. Okay.

8 Q. Yeah, fourth page from the end. And the text at
9 the top --- there's an item that says capacity price and
10 then it says capacity price forecast.

11 A. Oh, I see. Yeah, I have that. Thanks.

12 Q. Okay. Thank you. Would you agree with me that
13 on row 14, column C --- I'm sorry, strike that.

14 Column C, row 14 shows what the assumed clearing
15 price for the capacity price forecast that was used in
16 the NPV calculation; correct?

17 A. That's correct.

18 Q. And would you agree with me that that number ---
19 are you aware of the actual clearing price in the most
20 recent base-residual auction?

21 A. I'm not aware of the actual number, but from
22 reading testimony I'm aware that it's lower than this
23 number.

24 Q. Okay. Are you aware that the actual clearing
25 price went down from 2019-2020 to 2020-'21?

- 1 A. Not specifically, but I'm not surprised.
- 2 Q. Okay. And in --- the capacity price forecast
3 that was used for the NPV calculation, the assumption was
4 that the capacity price figure would go up; correct?
- 5 A. Correct.
- 6 Q. Okay. Could you please turn to the response tab
7 of this page, which is --- I think it's probably right in
8 the middle, maybe the tenth page.
- 9 A. Think I got it on my first try.
- 10 Q. Better than me. Looking down at row 22, do you
11 see where it says forced outage percentage?
- 12 A. I do, yes.
- 13 Q. And then it reports the --- a forced outage rate
14 from 2011 through 2016; is that correct?
- 15 A. That's correct.
- 16 Q. And these figures were provided by a supply in
17 response to the RFP; correct?
- 18 A. That's correct.
- 19 Q. And you relied on them in developing the assumed
20 force outage rate that was used in the dispatch model;
21 correct?
- 22 A. That's correct.
- 23 Q. To your understanding, is that forced outage
24 rate the equivalent forced outage rate of Pleasants?
- 25 A. It was my understanding. I've seen some

1 testimony related to this. But this is typically what we
2 use as the forced outage rate in an engagement like this
3 to calculate UCAP.

4 Q. Okay. And the equivalent forced outage rate not
5 only includes total outages, but also accounts for forced
6 D-rates that might arise due to operational issues;
7 correct?

8 A. Right.

9 Q. Okay. And now could you please turn to the from
10 dispatch page, which is a couple pages later?

11 A. Yes, I have it.

12 Q. And looking at row 10, do you see where it says
13 forced outage percentage?

14 A. I do, yes.

15 Q. And that was the forced outage rate that was
16 assumed for the dispatch modeling; correct?

17 A. Correct.

18 Q. And at the time that you ran the dispatch model,
19 it was your understanding that that was the equivalent
20 forced outage rate; correct?

21 A. Correct.

22 ATTORNEY SOULES:

23 No further questions, Your Honor.

24 Thank you.

25 CHAIRMAN:

1 Thank you. Mr. Williamson?

2 ATTORNEY BRANDFASS:

3 We have no questions, Your Honor.

4 CHAIRMAN:

5 All right. Mr. Hanna?

6 ATTORNEY HANNA:

7 No questions, Your Honor.

8 CHAIRMAN:

9 I'm sorry, John.

10 ATTORNEY MCGHEE:

11 Thank you, Your Honor.

12 CHAIRMAN:

13 Just didn't see you.

14 CROSS EXAMINATION

15 BY ATTORNEY MCGHEE:

16 Q. Mr. Lee, my name is John McGhee and we represent
17 Longview Power. And I do have some questions for you.

18 A. Okay.

19 Q. Earlier in your testimony today, and I believe
20 in your Direct, you indicated that there were non-
21 potential --- actual or potential generating facilities
22 that submitted prequalification documents?

23 A. That's correct.

24 Q. I noted in your Rebuttal testimony on page 3,
25 lines 21 to 22, that you reference that there were eight

1 generating facilities that submitted prequalification
2 packages. Is that simply an error in the number that was
3 printed in one or the other of the Direct or Rebuttal?

4 A. Can you point me on the Rebuttal what line
5 number?

6 CHAIRMAN:

7 Twenty-one (21) and 22.

8 A. Twenty-one (21).

9 CHAIRMAN:

10 Page 3 of 35.

11 A. Yeah. I'm not sure sitting here right now what
12 the difference between the nine and the eight is. And it
13 may be that one is a mistake, but ---

14 BY ATTORNEY MCGHEE:

15 Q. Okay.

16 A. --- I'm not sure.

17 Q. In your Direct testimony at page five, you'd
18 indicated that CRA believes that a sufficient number of
19 APS zone bids were received. And my question is simply,
20 do you know how many generators or anticipated generators
21 exist in the APS zone?

22 A. Total number of generating units or potential
23 generating units in the APS zone?

24 Q. Yes, sir.

25 A. I don't know that number, no.

1 Q. On page six of your Direct, you make reference
2 to a website was put up during the RFP process, or as
3 part of the RFP process. Is that correct, that a website
4 was created as part of the process?

5 A. That is correct, yes.

6 Q. And is it correct that that website includes a Q
7 and A, or question and answer, section?

8 A. It is true, yes.

9 Q. Okay. Given that we've heard that the bid
10 process was rolled out on December 26th and the
11 prequalification information was due on December 23rd of
12 2016, it appeared to me from looking at the Q and A
13 section of that website, which is part of the CAD Cross-9
14 that was referred to yesterday, that the first Q and A's
15 were actually posted not until Monday, December 27. Can
16 you agree or disagree that the Q and A's were posted not
17 until after the prequalification information was due
18 back?

19 A. That is probably true, yes.

20 Q. Also, it appeared that on the Q and A section on
21 the website there was a statement to the effect that CRA
22 and MonPower do not anticipate disclosing details of the
23 rating system prior to the proposal due date, would you
24 agree with that?

25 A. I would agree, yes.

1 Q. And it does appear that there is reference, both
2 in the Q and A --- or starting with the Q and A, that if
3 someone has questions about how the bids are going to be
4 scored that they would generally be referred to pages 21
5 through 26 of the RFP itself. Do you recall that, at
6 least generally, as how that was set up?

7 A. I do, yes. Yes.

8 Q. In looking at pages 21 through 26 of the RFP
9 itself, which may discuss generally how the rating is
10 going to work for the people --- or the entities that
11 submit bids, do those pages include a specific scoring
12 system that would, for instance, tell you how many points
13 were assigned to any particular factor?

14 A. Not a specific point reference for each of them,
15 no.

16 Q. Would you agree, for instance, if someone was
17 taking a test that had three parts and the first part of
18 the test was going to be weighted 75 percent of the total
19 score, second part 20 percent and third part only 5
20 percent, that it would be important to the test taker to
21 know what part of the test was being more heavily graded?

22 A. That may be true, but this isn't a test.

23 Q. At page eight of your Direct, I believe it's
24 lines two and three, you do make reference to acknowledge
25 that there was a predetermined scoring criteria for

1 purpose of scoring the bids. Is that correct?

2 A. That's true. We wanted to develop the scoring
3 system before we received bids to make sure there's no
4 perception that the scoring was somehow devised to favor
5 one bidder over another.

6 Q. Refer you over to your Rebuttal testimony at
7 page six, I believe it's lines one and two, page six of
8 your Rebuttal. You appear to reflect or state in that
9 Rebuttal testimony that no bidders expressed any specific
10 concerns or raised questions about the evaluation
11 process. Do you acknowledge that Longview asked
12 questions during the bidding process about how the bid
13 was going to be scored?

14 A. I don't think you read the full sentence in my
15 testimony, because the testimony --- the sentence you
16 just read was in reference to the calls with bidders.
17 And on those calls no bidders expressed any specific
18 concerns.

19 Q. Okay. Let me ask this then. You acknowledged
20 that Longview asked questions about how the bids would be
21 scored during the process?

22 A. Yes. The questions are on the website, that you
23 referred to.

24 Q. And were their inquiries responded to by
25 reference to the generic information on the Q and A on

1 the website, which has the cross reference to pages 21 to
2 26 of the RFP that do not include a specific scoring?

3 A. That's right. We did not disclose the specific
4 scoring system to the bidders in advance. And the reason
5 we typically do that is we don't like to create an
6 opportunity, potentially, for bidders to sort of gain
7 their responses or --- you know, we want to try to get
8 honest responses as best we can without people trying to
9 figure out how they're going to get the most number of
10 points for this or that, or change their response to, you
11 know, optimize the score versus --- we want honest
12 answers.

13 So we asked for basic information on the plant,
14 we had a scoring system in place that was developed in
15 advance. They were objective. In almost all cases those
16 non-price factors were objective, factors that really,
17 knowing the scoring, would have no bearing on how you
18 should be able to respond.

19 Q. And consistent with the explanation that you
20 just provided, if you again look at your Rebuttal at page
21 six, and this time lines five to seven, you indicate in
22 your experience that a full explanation, your words, of
23 relative weightings and scoring processes, is not
24 typically a part of RFPs of this kind. Is that your
25 position?

1 A. In the RFPs that I've been involved in, that is
2 not typical to give all of the details of how every
3 element is scored.

4 Q. In the opinion letter that you provided to
5 MonPower after having gone through this RFP process, the
6 February 27, 2017 opinion letter, at page seven do you
7 not indicate that the RFP should also clearly specify the
8 price and non-price criteria and the relative importance
9 of each criteria under which the proposals will be
10 evaluated in the decision-making process?

11 A. For the RFP if, you know, we laid out each of
12 the criteria, I believe the RFP document states that the
13 NPV is the most important factor. So I think the RFP
14 adhered to those principals.

15 Q. And you provided testimony, in Direct, submitted
16 to FERC as well; did you not?

17 A. Yes, I did.

18 Q. And didn't you provide a similar statement in
19 your FERC testimony as what's included in what we just
20 referred to in your opinion letter?

21 A. Yeah. I mean, I have to go back to check the
22 testimony line by line, but it would've been consistent.

23 Q. Okay. In your testimony, I believe it's your
24 Direct, page five --- I'm sorry, in your Rebuttal at page
25 five, lines three through four, you appear, to level of

1 criticism toward Longview witness Steven Gabel in that he
2 had expressed concerns or questions about how this
3 process is typically undertaken, the RFP process. Do you
4 see that?

5 A. Yes, I do.

6 Q. Do you acknowledge that the PJM Independent
7 Market Monitor had submitted concerns during the FERC
8 proceeding that the factors to be considered in the RFP
9 process, including specifically the transparency factor
10 that's part of the criticism or your leveling against Mr.
11 Gabel, that that entity or that market monitor ask
12 questions about the transparency factor?

13 A. I'd have to go back and check. Sitting here
14 right now, I'm not aware of exactly what criticisms were
15 leveled in the FERC case.

16 Q. Do you acknowledge that in the deficiency
17 letter, that the Chairman referred to yesterday, that had
18 been issued by FERC as part of this process, also asked
19 questions about the transparency factor?

20 A. I'd have to go back and check the deficiency
21 letter.

22 Q. If you were to accept that either of those
23 entities asked questions, do you believe that their
24 asking of those questions reflects a clearly unfounded
25 --- that the questions are clearly unfounded and evidence

1 of the lack of understanding of how the process works,
2 similar to the criticism you leveled against Mr. Gabel?

3 A. I mean, I'd have to look at the language in the
4 FERC deficiency request specifically. You know, it may
5 be that they just were requesting more information on the
6 process. I don't know. So I don't know that I agree
7 that it would be the same criticism of FERC.

8 Q. The only point I want to make here is would you
9 be critical of someone at least asking a question about
10 transparency?

11 A. I mean, I think it's fair to ask questions about
12 transparency generally in any process. I don't have an
13 issue with that. I think my issue with Mr. Gabel was
14 some of the specific criticisms he had, particularly with
15 respect to how the NPV analysis was done and what would
16 typically be expected to be disclosed related to the NPV
17 analysis.

18 Q. I'm going to turn your attention now to the NPV
19 analysis and ask what minimum megawatt output did you use
20 in your calculation of that NPV analysis?

21 A. I don't understand the question.

22 Q. Okay. As an input in doing the MPV, was there
23 an input factor that would show a minimum megawatt
24 output?

25 A. For each facility?

1 Q. Yes, sir.

2 A. Yes.

3 Q. Okay. As to the Pleasants plant, do you know
4 what the minimum megawatt output factor that you used
5 was?

6 A. Sitting here right now, I don't. I don't. I
7 don't think it shows up in the score --- in the NPV
8 analysis spreadsheet.

9 ATTORNEY MCGHEE:

10 I believe that's all I have. Thank
11 you, Your Honor.

12 CHAIRMAN:

13 Mr. Auville?

14 ATTORNEY AUVILLE:

15 No questions, Your Honor. Thank you.

16 ATTORNEY BECHER:

17 Just a few from Sierra Club, Your
18 Honor.

19 CROSS EXAMINATION

20 BY ATTORNEY BECHER:

21 Q. Good afternoon, Mr. Lee.

22 A. Good afternoon.

23 Q. Good morning, I think, still.

24 A. Good morning, still. Still morning.

25 Q. Yes, thankfully. I want to make sure I have

1 clarity on your role in these --- in this process.

2 A. Sure.

3 Q. So CRA, you were retained to design and carry
4 out the RFP?

5 A. That's right.

6 Q. And CRA was the entity that designed and
7 implemented the net present value calculation also;
8 correct?

9 A. That's correct.

10 Q. Okay. And you've had some responses in your
11 Rebuttal testimony to criticisms of that net present
12 value testimony, basically saying they're not applicable
13 to the relative calculation of the NPV between the
14 bidders for the RFP; is that correct?

15 A. I'm not quite sure I understand the question.

16 Q. Okay. So there had been some criticism by
17 interveners, for example, of the failure to use a
18 sensitivity analysis ---

19 A. Right.

20 Q. --- in that present value calculation. And I
21 believe your Rebuttal response was that, essentially,
22 doing a sensitivity analysis wouldn't have changed the
23 relative outcome between bidders?

24 A. I don't believe it would've in this case, no.

25 Q. Okay. Is that a fair assessment of your

1 testimony?

2 A. I think generally, yes.

3 Q. Okay. And my question is, was the net present
4 value calculation designed primarily to be used within
5 the context of this RFP?

6 A. It wasn't --- yeah, I mean, it was designed for
7 this RFP, certainly. I mean, I think an NPV analysis is
8 a fairly common tool, and we at CRA use it all the time.
9 I don't know that the NPV model itself was specifically
10 developed just for this project. Probably at least part
11 of it existed ---

12 Q. But the main purpose of implementing it ---

13 A. --- from other engagements.

14 Q. --- was to evaluate the differences between
15 bidders ---

16 A. Yes.

17 Q. --- was through this RPF?

18 A. Yes.

19 Q. And there may have been different considerations
20 if you had used it to --- for other purposes, say to get
21 the most accurate NPV value possible?

22 A. Again, I would say we use similar tools. It
23 depends on the client engagements. So for example, this
24 NPV was a revenue requirements NPV, so it was done from
25 the perspective of customers.

1 Q. We may have a client engagement that uses a
2 similar NPV tool that's for a merchant facility, or
3 something like that, where a revenue requirement isn't
4 the appropriate evaluation metric. I guess I'm just
5 confused as to what you mean developed for this -?

6 A. I don't mean design from scratch.

7 Q. Okay. But you evaluated what you had, you chose
8 an NPV process because you thought it would be very
9 useful for this RFP.

10 A. Yes.

11 Q. And your role, as you view it, in this RFP was
12 to primarily evaluate the difference between the bidders
13 to that RFP process?

14 A. Yes.

15 Q. Okay.

16 A. Yeah.

17 Q. Did the RFP process include any consideration of
18 market purchases from PJM in lieu of requiring any
19 physical asset or doing a formal as-purchased power
20 agreement?

21 A. No. I mean, I think I talked about this earlier
22 today, you know, the role I had was to design and execute
23 the RFP and evaluate the bids, and then make a
24 recommendation to MonPower of which of these options is
25 the lowest cost choice. They were free to not accept any

1 of the bids and do something different, but that wasn't
2 part of this scope, to evaluate what else might there be
3 in the full universe out there.

4 Q. Fair enough. I want to ask, you had mentioned
5 the value of producing during high dollar values --- or
6 high dollar hours.

7 A. Yes.

8 Q. And that was where a substantial portion of the
9 revenue came from; is that correct?

10 A. Yes. And that's, you know, just typical of how
11 plants operating in a PJM market.

12 Q. Can there be substantial penalties involved if
13 you're unable to operate during those high-peak hours?

14 A. Well, it's a penalty to not realize the high-
15 dollar hour. I don't --- you're not assessed a penalty
16 if you're un -.

17 Q. So if you're unable to, you know, produce, say,
18 during a high-volume emergency event, if you're called
19 upon by PJM and you're unable to perform, do you know if
20 you're assessed a penalty for that?

21 A. I think as a capacity --- I thought you were
22 talking about the energy market earlier, and if you bid
23 into the energy market you'd be given a ---.

24 Q. And I'm just talking about the ability to
25 operate during those high-val --- or those high-dollar

1 times, which I assume are ---

2 A. Right.

3 Q. --- are high-demand times?

4 A. Yeah. I think so, but I'm not really fully
5 cognizant of all the specifics. I think Jay Roberto
6 talked about that a little bit yesterday.

7 Q. If CRA were asked to monetize the risk of the
8 current ELGs, would that have been something that CRA
9 would've been able to do? And by ELGs I mean effluent
10 limitation guidelines.

11 A. To monetize the risk?

12 Q. If they were asked to be able to put a value to
13 --- well, let me scratch that and ask it another way.

14 Is your understanding of risk something that may
15 or may not happen, but if it happens it can cost the
16 entity money?

17 A. Sure.

18 Q. Okay. And among other things, the ELGs are
19 something that could possible cost this plant money in
20 the future?

21 A. Yes.

22 Q. Okay. If CRA were asked to put a monetary value
23 on that, could they come up with a calculation to do so?

24 A. Yes, but I think in this case that's pretty
25 straightforward. You know, the Pleasants bid included an

1 estimate of what ELG compliance is going to cost for the
2 facility and, you know, should the ELG move ahead, you
3 know, what it would cost and when it would happen. So I
4 don't view that as a major risk, I mean I think it is
5 something we took a look at, you know, using the cost
6 estimates as provided by Pleasants.

7 Q. So you took a look at it and decided it was not
8 substantial enough to include in the economic
9 calculations?

10 A. No. I think I might have said it earlier, but
11 you know, we try to include, in the 15-year NPV, things
12 that were known and knowable and fairly certain, with
13 respect to both magnitude and timing. And the ELG
14 certainly didn't meet that standard. But if ELG, you
15 know, were to go forward, the Pleasant bid included a
16 cost-estimate for compliance with that. Now they did
17 caveat it saying that they're still studying ELG
18 compliance costs, and they provided a range on those
19 costs. But we did put those into the model to take a
20 look at whether or not it makes much of a difference, and
21 it does not.

22 Q. And you also didn't consider potential carbon
23 costs; is that correct, in the net present value
24 calculation?

25 A. We didn't, but see it would've been inconsistent

1 with the underlying forecast to include carbon costs. So
2 if carbon regulation happens, that's going to have an
3 impact on coal prices, probably lower them, it's going to
4 have an effect on natural gas prices, it's going to have
5 an effect on power prices. So it wouldn't be consistent
6 with our underlying forecast to layer in a cost just for
7 CO2, because there were so many other dimensions that
8 would change.

9 In addition, you know, if you look back at
10 environmental policy, going back, you know, 20 years or
11 more, it's hard to know --- the implementation details
12 have a very major impact on how much value it would add
13 or take away from a given facility. So you know, if you
14 took a look at, say, the SO2 program, SO2 program that's
15 going to costs coal facilities in general. But the EPA
16 allocated credits in perpetuity to all of those units.

17 So even if the plant shut down, the owner would
18 get the SO2 credits in perpetuity. So the SO2 credits
19 offset the costs quite a bit of environmental compliance.
20 And, in fact, in some scenarios it may provide value to
21 the residual owner of those credits.

22 Q. And I understand there's uncertainty about how
23 it would be implemented. But do you think it's likely
24 that it would affect coal and gas prices to the same ---
25 or coal and gas to the same extent?

1 A. A CO2 program? No, it would affect coal price.
2 Coal prices would drop, though, under a CO2 program.

3 Q. Would coal production drop?

4 A. Probably. I mean, CO2, you know --- the CO2
5 intensity of coal is, I think, 20 --- 205.09 or something
6 pounds per million BTU, if my numbers are right. Gas is
7 about half that. So yes, it does affect coal generators
8 more. But understanding what the cost is depends on
9 implementation details and timing, and a host of other
10 factors.

11 Q. And just so I'm clear, do you think that would
12 cause a reduction in coal supply, coal produced by mining
13 operations?

14 A. I think the production of coal will be
15 sufficient to meet the demand for coal. So I don't think
16 a ---.

17 Q. Could it affect price?

18 A. I'm sorry?

19 Q. Could it affect the price?

20 A. Yeah, I think I just said it did. I think a CO2
21 plan is only going to lower the price of coal.

22 Q. If a supply is being reduced, could that affect
23 the price?

24 A. I think it depends on the scenario you're
25 talking about for how --- or why coal is in short supply,

1 where supply is lower. If it was a case where --- you
2 know, and if you go back a few years to there was a --- I
3 don't know, probably five or six years ago is my guess,
4 Central App coal prices spiked because of short supply in
5 Central App, you know, greater demand. If you're talking
6 about a reduction in coal demand due to a CO2 policy, I
7 don't think coal prices will spike as a result of that.
8 I think you'll see the more expensive coal producers go
9 out of business, I think there will be ample supplies.
10 It'll be the lower cost producers that survive, and I
11 think market prices will decline.

12 Q. Are you aware there's a standing Supreme Court
13 case that holds EPA has the duty to regulate CO2
14 emissions, if in fact, the Agency finds it will affect
15 health and welfare, and then in 2009 EPA did make that
16 finding?

17 A. I'm not aware of all the specifics, but
18 certainly CO2 is something that's been debated and talked
19 about for a long time.

20 ATTORNEY BECHER:

21 Nothing further.

22 ATTORNEY CALLAS:

23 Just two quick Redirect questions.

24 REDIRECT EXAMINATION

25 BY ATTORNEY CALLAS:

1 Q. Mr. Becher asked you a question about comparing
2 the asset against the market. Did your NPV analysis
3 impliedly compare a resource to the general market?

4 A. The NPV --- positive NPV generally indicates
5 that you'd be better off buying this asset than buying
6 power from the market, yes.

7 Q. As in contrary to negative NPV would ---?

8 A. Better off buying from the market, if it's at a
9 negative NPV. Yes.

10 Q. Okay. And one final question. Mr. Soules asked
11 you a question about comparing the career capacity on
12 your model with historical career capacity of Pleasants.
13 Do you recall that?

14 A. I do, yes.

15 Q. Would MonPower, as the owner presence, perhaps
16 have a different bid strategy than a supplier who's going
17 out of business, and having different effluents affect
18 the bid strategy of the two companies?

19 A. It certainly might. And I think Mr. Roberto
20 talked about some of that yesterday. Capacity markets
21 aren't really my area of expertise, though.

22 ATTORNEY CALLAS:

23 Okay. Thank you, Mr. Lee.

24 CHAIRMAN:

25 Look at your Direct. I want to ask

1 some questions on your testimony, your Direct testimony
2 page one. I'm sorry. We're looking at page one of your
3 Direct testimony.

4 A. Yes.

5 CHAIRMAN:

6 At line 13 you say, I oversee and
7 manage the process as an independent monitor RFP manager.

8 A. Yes.

9 CHAIRMAN:

10 What does the term independent in that
11 context mean? What was your independence?

12 A. We executed the process without, really,
13 oversight from MonPower, without their influence on how
14 we evaluate the bids and how we communicate with bidders.
15 MonPower was largely insulated from executing the
16 process.

17 CHAIRMAN:

18 There has been testimony from time to
19 time about consultation.

20 A. Yes.

21 CHAIRMAN:

22 You had meetings and consultation with
23 them during the process; did you not?

24 A. Certainly at the outset. I mean, it depends how
25 you define the process. You know, the conversations with

1 MonPower were pretty limited from the launch of the RFP
2 through the point when we were finalizing our valuation.
3 Prior to the launch of the RFP, certainly, we want to
4 have the RFP designed in such a way that it best meets
5 MonPower and ratepayer needs. You know, it's not CRA's
6 role to decide how many megawatts are required and that
7 kind of thing. I mean, there was certainly interaction
8 around defining what we need and what's the best way to
9 go about doing this. But once we launched, we were
10 pretty independent.

11 CHAIRMAN:

12 Who makes the ultimate --- who made the
13 ultimate decision?

14 A. About whether or not to go ahead with the
15 purchase?

16 CHAIRMAN:

17 Right. Well, with the recommendation.

18 A. The recommendation was mine. Once it goes to
19 MonPower, you know, they were free to accept the
20 recommendation or not.

21 CHAIRMAN:

22 Okay.

23 A. You know, I could see a case where, you know,
24 maybe we have one asset with a positive NPV, but it's
25 very small, a very small positive, and there may be

1 reasons why. So you know, I don't think any of these are
2 really, you know, our best option. We're not going to
3 execute a deal with any of these.

4 CHAIRMAN:

5 The - you mentioned the Alleghany
6 principles, which were never truly defined. I take it
7 that's standards or principals that came out of a FERC
8 proceeding; right?

9 A. That's right. So they're in the opinion letter,
10 but they're sort of guidelines for how RFPs or processes
11 with affiliate participation should operate and those
12 four --- you know, transparency oversight definition like
13 on the fourth, but it's in the opinion letter. And you
14 know, we try to adhere to those principles when we go
15 forward.

16 CHAIRMAN:

17 Is there a --- I asked somebody this
18 the other day. Has there been a firm FERC
19 acknowledgement that those principles have been adhered
20 to, or is that still going to be -?

21 A. The FERC case is still pending.

22 CHAIRMAN:

23 Okay.

24 A. Still pending.

25 CHAIRMAN:

1 You say CRA has independently monitored
2 and administered over 35 procurements --- this is at line
3 13. And how many of those were you involved as advisor
4 and manager?

5 A. For these --- let me see. This is which page?

6 CHAIRMAN:

7 I'm sorry. This is page two, line 12
8 and 13.

9 A. So I'd be involved in pretty much all of these.
10 They weren't all RFP, some we talked about earlier which
11 are default service auctions, they're more formal
12 auctions and processes. But in all of those processes
13 there's --- well, not all of them. But generally in
14 those there are affiliates participating, and there is
15 potentially FERC oversight in those.

16 CHAIRMAN:

17 Have you ever been cited by a FERC for
18 failure to comply with the Alleghany principles?

19 A. No.

20 CHAIRMAN:

21 Page seven of your Direct at lines
22 three, four and five, you're talking about the helpline.
23 You say that CRA fielded all RFP related questions from
24 potential bidders at that help line. CRA complied and
25 scrubbed all questions of identifying information. And

1 by identifying information, who are you --- what
2 information was scrubbed?

3 A. So what we want is to make sure that when we ---
4 if there's a question where we need MonPower's input,
5 that when MonPower sees that question they don't know who
6 asked the question. And so that the response isn't
7 tailored to somehow exclude a party or whatever. So the
8 information that we scrub would be the name of the person
9 who asked it, their company. And depending on the nature
10 of the question, there may be some other details you have
11 to essentially redact so that you couldn't figure out who
12 asked it.

13 CHAIRMAN:

14 And at that point, did they have the
15 list of people? I take it they did not.

16 A. I'd have to go back and check whether or not
17 they had the list of who was submitted bids or what kind
18 of communication was around that. I don't recall.

19 CHAIRMAN:

20 Well, I was having a little bit of
21 trouble seeing how they wouldn't be able to pick out.

22 A. It depends on the question, though; right? I
23 mean ---.

24 CHAIRMAN:

25 I suppose that's right. At the top of

1 page eight, which is the sentence that follows from the
2 bottom of page seven, both price and non-price criteria
3 were considered in a bid evaluation where apply --- and
4 were applied to the conforming bids received. And CRA
5 conducted a blind evaluation and scored the bids using
6 the predetermined scoring criteria. What exactly did you
7 mean by a blind evaluation?

8 A. So we went through and we scored the bids
9 without consideration of who it was, who was submitting
10 the bid.

11 CHAIRMAN:

12 You didn't know who it was, is
13 that ---?

14 A. I knew who the bidders were. But, you know, we
15 reviewed some of the data and did scoring on the values
16 that were there, without preference or prejudice, I
17 guess, about who was doing it. That's what that is
18 intended to mean.

19 CHAIRMAN:

20 So blind is not totally blind, blind is
21 sort of blind.

22 A. But there's only a handful of bidders, right,
23 and so ---.

24 CHAIRMAN:

25 Page four, line 15. Now I write these

1 notes to myself and then I ask when I get here, I'm not
2 sure they always make sense. But in any event, you say
3 CRA's use of this type of model, being the NPV model, was
4 described in detail in the RFP. And those types of
5 models are commonly used to estimate the financial
6 implications of potential investments and generating
7 facilities. Was there any surprise or anything usual
8 that came out of this that --- or anything that to you
9 was a surprise as to how this came out? Not necessarily
10 who won, but the information that you gleaned out of it.

11 A. I mean, I don't think anything was really
12 surprising. I mean, until we run the model under the
13 forecast and, you know, the assumptions, I don't think
14 there was a --- you know, you don't know exactly what the
15 answer's going to be. But I don't think there's anything
16 surprising about the process, the results, the NPV tool.
17 I mean, these things are pretty commonly used, and we're
18 using them all the time.

19 CHAIRMAN:

20 In the 35 or so that you say you
21 participated in, how many of them --- did you use an NPV
22 type approach in those?

23 A. You know, in all of the RFPs we have. In the
24 default service procurements, that's not really the ---
25 we're not --- nobody's bidding an asset, it's the

1 suppliers are bidding to supply the utility for their
2 load at a fixed price per megawatt hour. So it's ---
3 that's more of a straightforward valuation.

4 CHAIRMAN:

5 Page 12, line --- the question and
6 answer beginning at line 7, this is still in --- it's in
7 your Rebuttal. I'm sorry.

8 A. Okay.

9 CHAIRMAN:

10 Did CRA understand that AE Supply might
11 participate in the RFP, you say yes, I had a general
12 understanding that might be the case. What was the basis
13 for your general understanding?

14 A. You know, when we started down the path on this,
15 it was a discussion that, you know, AE Supply might be
16 bidding. But I had no specific knowledge of --- you
17 know, that they definitely would bid or what have you. I
18 mean, there was certainly trade press articles and that
19 kind of thing about the Pleasants facility. And I saw
20 some of those.

21 CHAIRMAN:

22 Did you raise any concerns about that?

23 A. Not particular --- any particular concerns. I
24 mean, it's --- I've been involved in other affiliate
25 transactions and, you know, we adhere to the principles.

1 CHAIRMAN:

2 Alleghany principles ---

3 A. Alleghany principles.

4 CHAIRMAN:

5 --- which we all know about now.

6 A. Right. And that's --- and those are designed to
7 facilitate processes where there may be an affiliate
8 participating. So I don't think there's any --- it's not
9 like this is new ground in that sense. But you do have
10 to be careful.

11 CHAIRMAN:

12 Your question in your Rebuttal at page
13 16, line 11, which is the CRA analysis and a provision
14 for the shutdown, as I understand your testimony, you
15 said it was not included as a part ---?

16 A. It was not, no.

17 CHAIRMAN:

18 But also, I wrote at the bottom,
19 could've made some adjustment for it. And I don't know
20 if that was my impression of what your testimony says or
21 whether that's a question I'm asking you now.

22 A. Well, I can answer it I guess.

23 CHAIRMAN:

24 As a practical matter, you could have
25 make an adjustment for it, if you had intended to?

1 A. If we had intended to, but there's a number of
2 factors to consider and I talked about some of them
3 earlier. You know, inner modeling, the facility is
4 operating and making money at the end of the NPV period.
5 And typically an owner of a facility is not going to shut
6 a plant that's making money down. The CAPX included in
7 the NPV analysis was consistent with ongoing operation;
8 right? If you're going to shut the plant down, in a
9 couple years you're going to start to wind down your
10 investment in the plant.

11 We didn't make any kind of adjustment for fixed
12 O&M or CAPX as you get out towards the end of the
13 modeling horizon. There's uncertainty on when the
14 shutdown would happen, and furthermore there's
15 uncertainty on how much it's actually going to cost.

16 I think Mr. Roberto talked yesterday about how a
17 site might have significant value, right. So it's going
18 to cost to shut the plant down, but if you can sell the
19 site for development for, you know, a new combined cycle
20 facility, it has value because of the inner connection
21 capabilities at the site, and other values.

22 So we could've included something, but it
23 would've been fairly speculative as to, you know, what
24 that cost might be.

25 CHAIRMAN:

1 Top of page 22, line 35. I think it
2 reads as a sentence if you join the two sentences
3 together. But it is not a sentence. But one of my
4 characterizations, I take it that you didn't have
5 anything --- you just meant that to run on then to ---
6 there is no basis?

7 A. Yes, I did. Sorry.

8 CHAIRMAN:

9 So it should be, for instance, after
10 dynamics comma.

11 A. A comma, yeah.

12 CHAIRMAN:

13 And then there.

14 A. And then there.

15 CHAIRMAN:

16 But there was --- there's not something
17 missing there?

18 A. No, I think that that was ---.

19 CHAIRMAN:

20 All right. And I was also a little bit
21 confused at the sentence at line 12 that says --- that
22 same page, while I strongly agree with CAD's assessment
23 of the CRA dispatch model ---.

24 A. It should be disagree, I believe.

25 CHAIRMAN:

1 That's what I have. Thank you, Mr.
2 Lee.

3 A. Thank you.

4 CHAIRMAN:

5 It's 11:44, do you want to break for
6 lunch now and come back at 1:00? Or do you want to keep
7 going and take --- we're early enough, you could probably
8 beat the crowd if you go right now. We're not going to
9 get them all done before lunch, that's for sure, so ---.
10 All right. It's 11:45, we'll break until 1:00, give you
11 a little bit of time extra, and we'll start back at 1
12 o'clock with, I guess, Mr. Sweet. All right.

13 LUNCH BREAK TAKEN

14 CHAIRMAN:

15 All right. We're back on the record in
16 PSC Case Number 17-0296-E-PC. We have completed Mr. Lee
17 and our next witness I think is Mr. Sweet.

18 ATTORNEY CALLAS:

19 That's correct. The Companies call Mr.
20 Sweet.

21 -----
22 THOMAS SWEET, HAVING BEEN FIRST DULY SWORN, TESTIFIED AS
23 FOLLOWS:

24 -----
25 DIRECT EXAMINATION

1 BY ATTORNEY CALLAS:

2 Q. Hello, Mr. Sweet.

3 A. Hello.

4 Q. Can you hear me okay?

5 A. Yes, I can.

6 Q. Yeah. To hear you okay, were going to need you
7 to pull that microphone up a lot closer to your mouth

8 A. Okay. Is that better?

9 Q. I think that's --- I think that's better.

10 A. Okay.

11 Q. Welcome. Could you provide your name and
12 business address and occupation for the Commission?

13 A. Yes, my name is Thomas Sweet. My business
14 address is 400 Perimeter Circle Terrace, Atlanta, Georgia
15 and I am the Director of ABB's Global Reference Case.

16 Q. Okay. In that connection and in sponsorship of
17 one of ABB's reference cases, did you prepare Direct and
18 Rebuttal testimony in this case?

19 A. Yes, I did.

20 Q. Do you see copies of those pieces of testimony
21 in the --- in the binder that's on the witness stand?

22 A. Yes, I do.

23 Q. Are there any corrections that you think need to
24 be made to either of those?

25 A. Yes, there is. In my Rebuttal testimony, page

1 11, on line 18 and 19, there should be a period after
2 factors and the statement in addition to short-term
3 market movements that needs to be removed.

4 Q. Okay. Any other changes, Mr. Sweet?

5 A. No, there is not.

6 Q. Okay.

7 ATTORNEY CALLAS:

8 I - Your Honor, I'd like to mark these
9 two pieces of testimony in the conventional way, Mr.
10 Sweet's Direct testimony which was revised from the one
11 included with the application and filed on July 10.

12 I'd like to have marked as Companies'
13 Exhibit TS-D. There is one exhibit to that testimony,
14 TS-1, that came in both confidential and public versions.
15 The confidential version is with the court reporter and
16 the clerk.

17 I'd also ask that the Rebuttal
18 testimony in its revised version that was filed on
19 September 25th be marked as Company Exhibit TS-R. It has
20 a single page that's confidential, page eight, and that
21 likewise is in the hands of the court reporter and the
22 clerk.

23 CHAIRMAN:

24 All right. The exhibits will be marked
25 as requested.

1 (Companies Exhibit TS-D marked for
2 identification.)

3 (Companies Exhibit TS-R marked for
4 identification.)

5 BY ATTORNEY CALLAS:

6 Q. Mr. Sweet, if I ask you the same questions
7 today, would you provide me the same answers that are in
8 that testimony?

9 A. Yes, I will.

10 Q. All right. Do you ask that the Commission
11 accept this as your sworn testimony in this case?

12 A. Yes, I do.

13 Q. Okay.

14 ATTORNEY CALLAS:

15 Your Honor, I'd move the admission of
16 the exhibits just referenced and offer Mr. Sweet for
17 Cross.

18 CHAIRMAN:

19 All right. Subject to Cross
20 Examination, the exhibits will be admitted. CAD?

21 ATTORNEY ROBERTS:

22 Mr. Chairman, Mr. Soules asked to
23 precede me in the Cross Examination order and I told him
24 that was fine with me if the Commission does not object.

25 CHAIRMAN:

1 It's all right. Go ahead.

2 ATTORNEY SOULES:

3 Thank you, Your Honor.

4 CROSS EXAMINATION

5 BY ATTORNEY SOULES:

6 Q. Good afternoon, Mr. Sweet. My name is Michael
7 Soules and I represent West Virginia Sun and West
8 Virginia Citizen Action Group in this proceeding. How
9 are you today?

10 A. I am doing fine, thank you.

11 Q. Good. You sponsored the gas capacity coal and
12 energy price forecast that were used in CRA's net present
13 value calculation; correct?

14 A. Yes, I did.

15 Q. And those price forecasts are from the spring
16 2016 reference case; correct?

17 A. Yes, they are.

18 Q. Okay. And the gas capacity and energy price
19 forecast were all completed in early May 2016; is that
20 correct?

21 A. That is correct.

22 Q. And the natural gas price forecast projects a
23 steady increase in natural gas prices over the next 20
24 years; correct?

25 A. Yes, over the 20 years they are increasing.

1 Yes.

2 Q. Okay. And the same is true of the APS energy
3 price forecast?

4 A. Yes.

5 Q. Okay. And the forecasted increase in natural
6 gas prices is a key driver of the forecasted increase in
7 energy prices; correct?

8 A. That is correct. Natural gas is the ---
9 probably the largest predictor of power prices.

10 Q. Okay. All right. During the course of this
11 case, you through the Companies provided in discovery
12 several ABB price forecasts other than the ones that were
13 used in the net present value calculation; correct?

14 A. Could you please repeat the question?

15 Q. Yeah. During the course of this case, did you
16 provide several other ABB price forecasts apart from the
17 ones that were used for purposes of the MPV calculation?

18 A. Yes, I believe.

19 CHAIRMAN:

20 You tend to die off at the end of your
21 sentences.

22 ATTORNEY SOULES:

23 Okay. All right. Thank you, Your
24 Honor.

25 A. Yes, I believe the fall 2016 was also provided.

1 BY ATTORNEY SOULES:

2 Q. Okay. As well as some earlier price forecasts
3 as well?

4 A. I do not believe so.

5 CHAIRMAN:

6 Do you have something in mind?

7 ATTORNEY SOULES:

8 Sure. Permission to approach, Your
9 Honor?

10 CHAIRMAN:

11 Yeah. Rather than have him search for
12 it if you know what it is.

13 ATTORNEY SOULES:

14 Could we have this document that's
15 being distributed marked as CAG-SUN Cross Exhibit 7? And
16 it's confidential, so we won't refer to any specific
17 numbers in this document.

18 CHAIRMAN:

19 Yeah. We didn't admit six, but I guess
20 that's --- we'll make this 7. That will be all right.
21 CAG-SUN Cross Examination Exhibit 7 is a ABB Forecast
22 Fall '13 through Fall '16.

23 (CAG-SUN Exhibit Cross-7 marked for
24 identification.)

25 ATTORNEY SOULES:

1 Thank you, Your Honor.

2 BY ATTORNEY SOULES:

3 Q. Mr. Sweet, do you recognize this document?

4 A. Yes, I do.

5 Q. And were these market price forecasts provided
6 during the course of this case?

7 A. Yes, it was.

8 Q. Okay. And this document includes energy,
9 natural gas, capacity, and coal price forecasts from fall
10 of 2013, spring and fall 2015 --- oh, I'm sorry, fall
11 2013, spring and fall 2014, spring and fall 2015, and
12 fall 2016; is that correct?

13 A. Yes, it is.

14 Q. Okay. Could you please turn to page six of your
15 Rebuttal testimony?

16 A. Okay. I'm there.

17 Q. Thank you. Starting on line 18, you respond to
18 West Virginia SUN-CAG's witness Mr. Schmissel's testimony
19 that ABB's projections of natural gas prices have changed
20 significantly over time. Do you see that?

21 A. Yes, I do.

22 Q. Okay. Yeah. ABB's spring 2015 Henry Hub
23 natural gas price forecast was lower than its fall 2014
24 forecast; correct?

25 A. Mr. Soules, is there a page of this document

1 you're referencing? No, I --- I found it.

2 CHAIRMAN:

3 It helps if you can give us a reference
4 to the witness. It will move things along.

5 ATTORNEY SOULES:

6 Okay. Thank you.

7 A. Yes, the spring '15 is lower than the --- spring
8 '15 Henry Hub forecast is lower than the fall '14.

9 BY ATTORNEY SOULES:

10 Q. And the fall 2015 forecast is lower than the
11 spring 2015 forecast; correct?

12 A. Yes.

13 Q. And ABB's spring 2016 forecast was lower than
14 its fall 2015 forecast?

15 A. Yes.

16 Q. And ABB's fall 2016 Henry Hub forecast is lower
17 than the spring 2016 forecast that was used by CRA;
18 correct?

19 A. In general, yes. There were --- some of the
20 years might have been a little higher, but generally it
21 was lower.

22 Q. Okay. Thank you. In addition to responding to
23 some specific critiques of the intervener witnesses, your
24 Rebuttal testimony also discusses several policy
25 proposals which you believe would effect --- could affect

1 energy and capacity prices or revenue for coal-fired
2 generations; is that correct?

3 A. That is correct.

4 Q. And I'd like to talk with you for a couple
5 minutes about those proposals. And you --- that
6 discussion begins on page 15 of your Rebuttal.

7 A. Okay. I'm there.

8 Q. Okay. Looking at line 16, the first one you
9 mention is a PJM capacity construct and public policy
10 senior task force?

11 A. Yes.

12 Q. And that's a PJM stakeholder process; correct?

13 A. I believe so, yes.

14 Q. Okay. Are you familiar with the details of
15 those specific proposals being discussed in that process?

16 A. Not the specific details, no.

17 Q. Are you aware that one of the proposals that's
18 been introduced in that process would define an
19 actionable subsidy in such a way that Pleasants would be
20 treated as a subsidized resource?

21 A. As I said, I'm not aware of all the details.
22 These type of reviews are done by my team to --- as part
23 of our understanding of the markets to develop our
24 reference case.

25 Q. Do you know whether that process has been

1 complete?

2 A. I do not.

3 Q. Okay. Do you have an opinion as to how that
4 would affect energy or capacity prices?

5 A. Until the policy is actually in place I wouldn't
6 know how --- you know, and remodel it, I wouldn't know
7 how it would affect prices.

8 Q. Okay. Looking at --- so kind of looking at
9 pages 15 to 16, there's a reference to that task force,
10 there's a reference to a filing by PJM at FERC, there's a
11 reference to comments filed by PJM at FERC. There's a
12 reference to a technical conference on page 16 and a
13 notice of proposed rulemaking.

14 Now I'm going down to 16, line 4. To your
15 knowledge, do you have opinions as to whether any of
16 those items would increase energy and capacity prices?

17 A. As I said earlier, until we would model these
18 impacts, I really couldn't say whether it would increase
19 or decrease electric prices.

20 Q. Okay. And would the same be true for increased
21 compensation for coal-fired generation?

22 A. That is correct.

23 Q. Just briefly, lower down on page 16, you refer
24 to the states that have nuclear power plants that have
25 adopted or are considering ZEC legislation?

1 A. Yes.

2 Q. Do you have an understanding of how those
3 generators are compensated in those states?

4 A. Again, currently they are not compensated for
5 the fact that they are zero emission credit sources to my
6 knowledge. You know, there are other --- I wouldn't say
7 compensation, but again, you know, in both --- and I
8 believe it's Illinois and New York, you know, those are
9 both regulated markets so they would have revenues from
10 those --- those entities.

11 Q. All right. And on page 17, you discuss a
12 Department of Energy electric grid study; correct?

13 A. Yes.

14 Q. DOE itself is not the entity that directly
15 regulates wholesale energy and capacity markets; correct?

16 A. Excuse me, can you repeat the first part of your
17 question?

18 Q. The Department of Energy does not directly
19 regulate?

20 A. Yes, that's correct.

21 Q. Okay. And you reviewed that grid study?

22 A. Someone on my team has reviewed and then
23 summarized, but I have not directly reviewed that study.

24 Q. Okay.

25 ATTORNEY SOULES:

1 No further questions, Your Honor.

2 Thank you.

3 CROSS EXAMINATION

4 BY ATTORNEY ROBERTS:

5 Q. Good afternoon, Mr. Sweet.

6 A. Good afternoon.

7 Q. I'm Jackie Roberts. I'm the Consumer Advocate
8 in West Virginia. You --- you had just answered in
9 response to a question by Mr. Soules that natural gas
10 prices are the greatest predictor of power prices. I may
11 not have gotten your quote exact, but do you recall that?

12 A. Yes, I do.

13 Q. And was there a time when coal prices were the
14 best predictor of power prices?

15 A. That would have to go back quite a few years.
16 The way we calculate electricity prices are --- you know,
17 it's based on which resource or the type --- which
18 resource is the marginal resource at a given hour. In
19 other words, what --- what power plant is generating that
20 last megawatt and that sets the market price.

21 Over recent years, natural gas-fired resources
22 have become the --- the fuel that sets that margin most
23 of the time throughout the hours of the year.

24 Q. And with respect to the PJM capacity task force
25 that Mr. Soules said Pleasants would be considered a

1 subsidized plant. Do you recall that question?

2 A. I do recall that question.

3 Q. Do you know what the basis of that might be that
4 they would consider Pleasants subsidized?

5 A. I do not.

6 Q. Would you expect it to be from a risk transfer?

7 A. Again, I wouldn't know under what mechanism it
8 would be considered.

9 Q. Okay. Let me begin at the beginning. So is it
10 ABB's service to provide modeling and forecasting that's
11 used by parties for various reasons?

12 A. Yes. In addition, we provide --- well, again,
13 we provide data, we provide modeling services, we provide
14 the software tools for individuals to do their own
15 modeling.

16 Q. And how long have you been at ABB?

17 A. I've been at ABB 17 years.

18 Q. My goodness. Who from MonPower engaged you?

19 A. Actually Mr. Jack engaged --- or purchased the
20 reference --- the spring 2016 reference case from us.

21 Q. And when was that?

22 A. I believe that was in October of 2016.

23 Q. And when was your fall outlook released?

24 A. The fall outlook was released in November of
25 2016.

1 Q. And these outlooks are reliably released on
2 these dates every year?

3 A. We try to, yes. We --- our clients get a little
4 upset if we don't release the first Friday in May and the
5 first Friday in November.

6 Q. Okay. And when the outlooks are released, they
7 represent ABB's current thinking about the contents of
8 the outlooks?

9 A. The --- ABB's current thinking about the state
10 of the markets that are reflected in those outlooks, yes.

11 Q. Okay. So unless you're shopping for forecasts,
12 wouldn't you expect your clients to want the most recent
13 outlooks?

14 ATTORNEY CALLAS:

15 Objection to the form and to the
16 insinuation of shopping.

17 CHAIRMAN:

18 Recast your question further.

19 BY ATTORNEY ROBERTS:

20 Q. Would your clients generally want the most
21 recent forecast for the purposes for which they use them?

22 A. Generally, they do, but sometimes they --- they
23 do not. But I do want to mention, you know, the forecast
24 was purchased in October and our latest one did not come
25 out until November or --- the next one wasn't until

1 November. And many times because of business planning
2 reasons, clients can't wait until the next release.

3 Q. Does anyone at First Energy subscribe to the
4 forecast?

5 A. Again, MonPower is one of our first --- in
6 recent time, the first time First Energy has --- or First
7 Energy Company has purchased the reference case.

8 Q. Okay. So when Mr. Jack purchased the spring
9 2016 outlook, was it safe to say that the fall 2016
10 outlook would be available before February 2017?

11 A. As I mentioned, the fall release came out in
12 November, so yes, it would be available before February
13 2017.

14 Q. Okay. For your spring 2016 outlook, how many
15 scenarios did you evaluate?

16 A. For spring 2016, we evaluated three scenarios.
17 We routinely perform a high and low gas scenario where we
18 look at the 10th percentile gas price forecast, our base
19 case which is generally the 50th and then the 90th
20 percentile.

21 And what those percentiles mean is that, you
22 know, on the low forecast side there's a 10 percent
23 chance that you'd have prices even lower and then on the
24 90th percentile case you know, there's still a, you know,
25 there's a 90 percent chance that you'll have prices lower

1 and then a 10 percent chance that they're higher.

2 Q. Why --- why did ABB think four additional ---
3 three or four scenarios were warranted?

4 A. The --- generally, it's what our clients want to
5 see. As I mentioned, we did the high and low gas. In
6 addition for spring and in most --- in all reference
7 cases, we do one of current market interest. Generally,
8 it has been a CO2 scenario, but for spring of '16 ---
9 well, in fall of '15 we did a clean power plant scenario.
10 There was little movement on that legislation, so for
11 spring, we did a high renewable sensitivity scenario.

12 Q. And for fall 2016, did the number of scenarios
13 change that you did as compared to the spring of 2016?

14 A. I would have to check. I believe in fall we
15 would have done three as well. We may have done four,
16 but I'm not sure.

17 Q. All right.

18 So at least three?

19 A. At least three, yes.

20 Q. Do you --- does ABB do the scenarios to
21 acknowledge the uncertainty regarding the price of
22 natural gas?

23 A. Well, there is uncertainty in many of our ---
24 our forecast drivers, but natural gas is a common
25 uncertainty or our clients wish to see the quantification

1 of the fuel as --- or natural gas as an additional
2 scenario.

3 Q. And --- and basically any - any data that you
4 think is subject to uncertainty that's significant, you
5 would run a scenario in your outlook for; is that
6 accurate?

7 A. Given --- yes, given our, you know, resource
8 availability of the team you know, we try to as many
9 scenarios as we can to continue to provide value to our
10 clients.

11 Q. Mr. Sweet, why was there confusion when you
12 filed your testimony over whether you were addressing the
13 spring or the fall 2016 scenario?

14 A. Quite frankly it was a simple matter of timing.
15 We're on a six-month cycle. When the request came in,
16 you know, we assumed it was the fall. It was just ---
17 you know, because we - fall was on our mind, so that ---.

18 Q. And when did the request come in?

19 A. You know what, I really can't say.

20 Q. Just month --- what month or time of year? Do
21 you have any idea?

22 ATTORNEY CALLAS:

23 Can we identify what request we're
24 talking about?

25 CHAIRMAN:

1 Yeah. Well, you just said what
2 request?

3 ATTORNEY ROBERTS:

4 I'm sorry. I can't hear what anyone is
5 saying?

6 CHAIRMAN:

7 You didn't specify what particular
8 request you were talking about, and so you just said when
9 the request came in and ---.

10 ATTORNEY ROBERTS:

11 Well, he said when the request ---.

12 CHAIRMAN:

13 Let me finish, please. The question
14 --- the question for clarification was that you identify
15 which request it was so that the witness could answer it.

16 ATTORNEY ROBERTS:

17 Okay.

18 BY ATTORNEY ROBERTS:

19 Q. Well, the request I'm talking about is the
20 request for your testimony which is what you referred to
21 as the request?

22 A. Yeah. So that would have been the filing of my
23 Direct testimony which was ultimately revised and
24 originally it was --- originally I believe the exhibit
25 --- well, regardless, I don't know when the original

1 testimony was filed. I know the revision was filed I
2 believe in July, but I'm not sure when the original
3 filing occurred.

4 Q. Do you recall whether you were engaged to do
5 this testimony in 2016 or 2017?

6 A. I was engaged to do the testimony in 2017.

7 Q. Thank you.

8 Would you agree that it's possible to evaluate
9 scenarios and risks of alternative resource options?

10 A. Yes, it is. It is possible to do those.

11 Q. And are you aware that that's an issue in this
12 case?

13 A. Well, after listening to the testimony, yes.
14 But at the time I prepared this, no.

15 Q. That's fair. And what is an IRP?

16 A. That is an integrated resource plan.

17 Q. Does it evaluate scenarios and risks of
18 alternative resource options?

19 A. Generally they do, yes.

20 Q. And has ABB prepared integrated resource plans
21 that evaluate scenarios and risks of alternative resource
22 options?

23 A. We have had in consulting engagements where ---
24 yes, for IRP work where we do evaluate multiple options.

25 Q. And was one of those in Indiana?

1 A. I --- it could have been. I don't know.

2 Q. I would like to show you a document marked CAD
3 Cross-11.

4 ATTORNEY ROBERTS:

5 Is that correct, Mr. Chairman?

6 CHAIRMAN:

7 We're having marked for identification
8 as CAD Cross-11, a 2016 Integrated Resource Plan Modeling
9 Summary prepared for Indianapolis Power and Light, by
10 ABB.

11 (CAD Exhibit Cross-11 was marked for
12 identification.)

13 BY ATTORNEY ROBERTS:

14 Q. Do you have that document in front of you, Mr.
15 Sweet?

16 A. Yes, I do.

17 Q. Do you recognize this?

18 A. I am aware of it. This is the first time I've
19 actually seen the document.

20 Q. Okay. Well what, I want to ask you about are a
21 couple of charts in this document, and if you can't speak
22 to them, just tell me.

23 The first is on page 10-57 and it's Figure 10.1
24 and it's entitled all scenarios, risk profile?

25 A. Yes, I'm there.

1 Q. What is that?

2 A. Okay.

3 Q. Or to be more accurate, I should probably say,
4 what does that show?

5 A. Okay. With some of our modeling tools, we have
6 the ability to consider multiple outcomes. And what this
7 graph shows is the results of those 50 outcomes for six
8 different plans and how they compare to one another.

9 Q. Okay. And if could then turn to page 10-61,
10 Figure 10.8 entitled all scenarios. Can you tell me what
11 this chart shows?

12 A. Yeah. I cannot, no. You know, unless I read
13 the report, I couldn't tell you.

14 Q. Okay. That's all right. If you turn to page
15 --- if you turn to the last page, there's some figures,
16 Figure 12-4 and Figure 12-5?

17 A. Yes.

18 Q. Can you explain to me what those --- these
19 tornado charts show?

20 A. Yes. A tornado chart is an analysis tool that
21 we use when we are evaluating the range of uncertainties
22 or the importance of various drivers that affect a final
23 result.

24 So the very topmost bar is the total range of
25 --- well, in this case it is revenue requirements, again,

1 it shows the width from the lowest value to the highest
2 value. We then --- in this type of analysis, in this
3 case, there are --- we were considering at least six
4 major uncertainties.

5 So for the uncertainty in energy price, we held
6 a variety of items or other uncertainty is constant,
7 varied the energy price and saw what that impact was on
8 total revenue requirements. And then we stepped through
9 all of the other uncertainties in a similar fashion.

10 But the purpose of this is to see the --- the
11 strength of the --- or actually how important the various
12 driver is to the overall result. Okay.

13 So the more narrow the bar the less important
14 that factor is. So in terms of having an effect on the
15 overall revenue requirements in Figure 12.4, the interest
16 expense, it appears to have the least impact and then
17 energy --- least impact on total based revenues and
18 energy price has the greatest impact.

19 Q. And does this also show that the risks aren't
20 symmetrical?

21 A. That is correct.

22 Q. And the same for figure 12.5?

23 A. Yes, and that's --- again, and that --- that
24 result does not surprise me. You know, many times the
25 results are asymmetric. Generally drivers tend to have

1 more risk on the high side than they do on the low side.

2 Q. And is this the kind of analysis that ABB could
3 have done for MonPower?

4 A. Yes, we could have done this, but we were just
5 asked to provide our standard off the shelf reference
6 case report. An IRP analysis like this would take much
7 longer and, you know, would be --- you know, consequently
8 cost more.

9 Q. And --- and the difference, I mean even though
10 your --- your base case had several scenarios in it?

11 A. Yes.

12 Q. Were you aware that the CRA evaluation did not
13 have any scenario analysis?

14 A. No, I was not aware of that.

15 ATTORNEY ROBERTS:

16 I have no other questions of Mr. Sweet.
17 Thank you.

18 CHAIRMAN:

19 Mr. Williamson?

20 ATTORNEY WILLIAMSON:

21 Yes, sir.

22 CROSS EXAMINATION

23 BY ATTORNEY WILLIAMSON:

24 Q. Good afternoon, Mr. Sweet. I'm Derrick
25 Williamson. I'm with WVEUG. I just have a couple of

1 questions for you.

2 A. Okay.

3 Q. And we are going to begin at the end.

4 A. All right. So if you go to the last page of
5 your Rebuttal testimony?

6 A. Okay. I'm there.

7 Q. And in line four, you're talking about energy
8 prices remaining volatile. How would you define volatile
9 energy prices?

10 A. Just basically that they would be uncertain as
11 we move forward and perform forecasts. There are
12 continual developments in fuel markets, in the organized
13 electric markets, environmental regulations, a whole slew
14 of items that can ultimately affect a forecast.

15 As these events become known and we incorporate
16 those into our forecasts, you know, they will be
17 affecting energy prices to various degrees.

18 Q. Would you have characterized the energy prices
19 over the last 10 to 12 years as volatile?

20 A. Yes, as well --- anticipating the future as
21 well.

22 Q. And then just one other question or area of
23 questions. On page 18, line 1, there's a question about
24 your awareness with respect to the West Virginia
25 governor's infrastructure plan. What is the basis for

1 your awareness that you discussed there? How did you
2 become aware?

3 A. As I mentioned, my team reviews events within
4 the markets and in the various states that can have an
5 impact on electricity price and that's just part of our
6 reference case research. So I was just in, you know,
7 reviewing, you know, various documents that we were aware
8 of this --- this event.

9 Q. Did you --- did you find those documents by
10 virtue of a press release or in some other form?

11 A. I'm not sure. I mean, my team has various
12 websites that they routinely check to find information.
13 You know, we have our own velocity sweet data tool that
14 we use. So again, just a variety of sources that they
15 rely on through their --- their day-to-day job
16 activities.

17 Q. And then so subsequently, did you review some
18 internal document that summarized that infrastructure
19 plan or did you review the infrastructure plan that ---?

20 A. I did not directly review it. I'm just aware of
21 the summary.

22 Q. So you were informed by your team of the
23 components of the plan?

24 A. Yes, yes.

25 Q. And then you included that --- your rendition of

1 it in your testimony?

2 A. That is correct.

3 Q. And would the same --- would it be the same with
4 respect to your awareness of proposed gas transmission
5 pipelines that you discuss on page 19? Or is that
6 slightly different?

7 A. That would be slightly different.

8 Q. And how so? Go ahead and explain.

9 A. Again, these are actual pipelines that, you
10 know, are moving a little bit more forward in their
11 development and they do since they have a --- a
12 significant impact on naturel gas prices in this area,
13 you know, we were a little --- scrutinizing that data
14 more carefully.

15 Q. Which data when you refer to?

16 A. Again, the --- you know, what pipelines are
17 proposed, what their schedule is, what their timing is.
18 That type of information ultimately gets included in our
19 gas infrastructure model which is used to develop the
20 electrode --- develop the natural gas prices that we use
21 in our reference case.

22 Q. Okay.

23 ATTORNEY WILLIAMSON:

24 Thank you. That's all the questions
25 that I have.

1 CHAIRMAN:

2 Do you have any questions?

3 ATTORNEY MCGHEE:

4 No questions, Your Honor.

5 CHAIRMAN:

6 Mr. Rodecker?

7 ATTORNEY RODECKER:

8 No questions, Your Honor.

9 CHAIRMAN:

10 Mr. Auville?

11 ATTORNEY AUVILLE:

12 No questions, Your Honor.

13 CHAIRMAN:

14 Mr. Becher?

15 ATTORNEY BECHER:

16 Just a couple, Your Honor, from Sierra
17 Club.

18 CROSS EXAMINATION

19 BY ATTORNEY BECHER:

20 Q. Good afternoon, Mr. Sweet.

21 A. Good afternoon.

22 Q. If you could turn to page 18 of your testimony.
23 You reference a plan by the West Virginia Governor's ---
24 West Virginia Governor, Jim Justice, to basically
25 subsidize Appalachian Coal to the tune of \$4.5 billion;

1 correct?

2 A. Yes.

3 Q. Would a subsidy of that magnitude likely take
4 Congressional action?

5 A. What was that?

6 Q. Would that take congressional action?

7 A. I wouldn't know. I'm sorry.

8 Q. Have you seen any movement in Congress to make
9 that happen, a proposal, a bill?

10 A. Nothing specific, no.

11 Q. Have you seen any explicit adoption of this plan
12 by President Donald Trump in his agenda?

13 A. I know initially there were some, for lack of a
14 better word, campaign promises to, you know, revitalize
15 the coal industry.

16 Q. Those were fairly general though?

17 A. They were very general, yes.

18 Q. So you haven't seen any statements from
19 President Trump about the \$4.5 billion subsidy?

20 A. No, I have not.

21 Q. And if you could turn to page 12 of your
22 Rebuttal testimony?

23 A. Okay. I'm there.

24 Q. You're faster than I am. You have a section
25 essentially criticizing Mr. Comings' analysis of six

1 percent higher actual prices. Do you see that?

2 A. Yes, I do.

3 Q. Okay. And you compared these prices to the APS
4 zonal price nodes; is that correct?

5 A. That is correct.

6 Q. Is it possible that Mr. Comings based this
7 analysis on the Pleasants' node?

8 A. With that analysis, we actually looked at both
9 in trying. And that's something my team does. We try to
10 get at the root of the issue. We did examine both the
11 Pleasants' node, as well as the zonal node. And in
12 either case, we couldn't explain that six percent.

13 Q. Okay. But you just addressed the zonal node
14 here in your testimony?

15 A. In the testimony, it was just the zonal node,
16 yes.

17 Q. Did Mr. Comings rely on this six percent higher
18 figure in his NPV calculations, the net present value
19 calculations?

20 A. I do not know. I would assume so.

21 Q. But you haven't examined his testimony to
22 determine if that's true or not?

23 A. I reviewed his testimony, but I don't recall
24 specifically.

25 Q. Which price does Pleasants receive, the APS

1 zonal price or the Pleasants' specific node?

2 A. That, I do not know.

3 ATTORNEY BECHER:

4 Nothing further.

5 CHAIRMAN:

6 All right. Any questions?

7 ATTORNEY CALLAS:

8 Yes, Your Honor. Thank you. I have
9 one rebuttal topic to address with Mr. Sweet.

10 REDIRECT EXAMINATION

11 BY ATTORNEY CALLAS:

12 Q. Mr. Sweet, during Ms. Roberts' examination of
13 you for the CAD, she introduced or identified, at least,
14 CAD Cross-11, the IRP for IPNL. Do you recall that?

15 A. Yes, I do.

16 Q. And took you through a couple of the charts in
17 there. It asked you about them. Would you say that any
18 of the data shown in those charts or, you know, the other
19 take-aways from those charts would be directly
20 transferrable to the opinions that you've rendered in
21 this case?

22 A. No.

23 Q. Do you know what the source of data for the ---?

24 CHAIRMAN:

25 Wait a minute. You say you don't?

1 A. No, they would not be transferrable to this.

2 BY ATTORNEY CALLAS:

3 Q. Do you know to the extent that those charts and
4 presentations that you've looked at incorporated ABB
5 information? Do you have any reason to believe that that
6 ABB information would be the spring 2016 reference case
7 for the APS zone?

8 A. No, it would not since this is referring to an
9 Indiana case.

10 ATTORNEY CALLAS:

11 Okay. Thank you. That's all I have.

12 ATTORNEY ROBERTS:

13 I would move CAD Cross-11 into the
14 record.

15 ATTORNEY PEPPER:

16 And Your Honor, I would move CAG-SUN
17 Cross-7 into the record.

18 CHAIRMAN:

19 All right. Without objection, they
20 will both be admitted. Questions?

21 COMMISSIONER LARRICK:

22 No, thank you.

23 CHAIRMAN:

24 Okay. The discussion that you have in
25 your Rebuttal testimony at page three. It's the question

1 and answer at 9 and 11. You talk about you don't expect
2 natural gas prices to remain as low as they are, and go
3 through an analysis. Give me briefly why you think
4 there's going to be a continuous upswing in gas prices.

5 A. Okay. A couple of factors. The first one being
6 that demand is increasing. And again.

7 CHAIRMAN:

8 As a result of what, generally?

9 A. Just general growth in the economy, but also
10 natural gas exports are increasing demand for natural
11 gas.

12 CHAIRMAN:

13 Okay.

14 A. The second item is that as demand increases, new
15 infrastructure needs to be built. For example, gas
16 transmission pipelines, as well as new wells need to be
17 drilled and have the natural gas extracted.

18 CHAIRMAN:

19 Hold on there. Now, wait a minute.
20 You mentioned five different lines, I think, that are
21 under construction. Maybe more. But at least five that
22 come through West Virginia, I believe, or near it. What
23 is the status of those, on those lines? Are they all
24 complete?

25 A. I'm not 100 percent sure. I know there are some

1 that are under construction. I'm not sure if they
2 physically go through West Virginia. But there is
3 construction occurring to basically move --- well, to
4 move the natural gas from the Marcellus and Utica shale
5 to the markets, both in the northeast, the south. And
6 ultimately for, you know, to the rest of the country.

7 CHAIRMAN:

8 Okay. Well, how does that --- why does
9 that drive the price up?

10 A. Okay. There was some explanation in my
11 testimony. But basically, as --- in order --- the
12 pipeline developers, they generally need to have
13 essentially a reservation for the line. You know,
14 they're not going to commence construction until they
15 have a certain percentage of users of that line. And as
16 part of that use fee, which generally ranges between \$1
17 and \$2, that, you know, once the pipeline developer has a
18 --- reaches a certain threshold, they would then begin
19 construction. And that \$1 or \$2 additional
20 transportation cost would get added on to the natural gas
21 price.

22 CHAIRMAN:

23 Okay. Anything else?

24 A. No.

25 CHAIRMAN:

1 The reason I said West Virginia, there
2 was a question somebody asked about page 19 of your
3 testimony. You said there are nine new transmission
4 lines proposed for West Virginia, including the Atlantic
5 Coast pipeline, the Mountain Valley pipeline, the Western
6 Marcellus pipeline, the Leach XPress Access South
7 pipeline, and the Railroad pipeline.

8 And those all are through West Virginia
9 in --- and interstate lines presumably?

10 A. Yes.

11 CHAIRMAN:

12 Okay. I always ask if I don't know the
13 answer. What is a node? I mean, I know if I get a node
14 on my throat, that's not a good thing, but what ---?

15 A. That's correct. On the electric system, a node
16 is basically a point where lines interconnect. It could
17 be where a --- a power plant connects to the transmission
18 system. It could be where two transmission lines meet at
19 a substation. So it's basically an interconnection
20 point.

21 CHAIRMAN:

22 Now, I know. Thank you, Mr. Sweet.

23 A. Thank you.

24 CHAIRMAN:

25 You're excused. Next in order?

1 ATTORNEY CALLAS:

2 Your Honor, the next witness is Mr.
3 Eberts.

4 -----

5 BRADLEY EBERTS, HAVING FIRST BEEN DULY SWORN, TESTIFIED
6 AS FOLLOWS:

7 -----

8 DIRECT EXAMINATION

9 BY ATTORNEY CALLAS:

10 Q. Good afternoon, Mr. Eberts.

11 A. Good afternoon.

12 Q. Could you introduce yourself to the Commission
13 please?

14 A. My name is Bradley D. Eberts and ---.

15 Q. Is your microphone on?

16 CHAIRMAN:

17 It's a little bright blue light on it.
18 If not, punch the gray button.

19 A. My name is Bradley D. Eberts. I work for
20 FirstEnergy Service Corp. Company, and my address is 76
21 South Main Street, Akron, Ohio.

22 BY ATTORNEY CALLAS:

23 Q. And did you prepare Direct and Rebuttal
24 testimony in this case?

25 A. I did.

1 ATTORNEY CALLAS:

2 Your Honor, the Companies have provided
3 the court reporter and the clerk with copies of Mr.
4 Eberts' Direct and Rebuttal testimony. We ask that the
5 Direct testimony be marked for identification as
6 Companies Exhibit BDE-D and that the Rebuttal testimony
7 be marked for identification as Companies Exhibit BDE-R.

8 (Companies Exhibit BDE-D marked for
9 identification.)

10 (Companies Exhibit BDE-R marked for
11 identification.)

12 ATTORNEY CALLAS:

13 The Direct testimony is accompanied by
14 two exhibits and the Rebuttal testimony is accompanied by
15 an additional six exhibits.

16 CHAIRMAN:

17 All right. They're all identified.

18 BY ATTORNEY CALLAS:

19 Q. Mr. Eberts, do you have any changes or
20 corrections to your Direct or Rebuttal testimony?

21 A. Yes, I do.

22 Q. Could you please explain those to the
23 Commission?

24 A. Yes. On BDE-D, page 6 of 15, line eight, the
25 sentence says and consequently. I'd insert the word they

1 have in depth. On page 12, line 13, the number starts
2 out 3,426. It should be 3,421. On line 14, the number
3 3,760 should be 3,752. And on page 15, line one, the
4 first --- the sentence is PJM adjusts its APS and should
5 insert the word forecast zone. The word forecast should
6 be inserted between APS and zone.

7 Q. Do you mean --- perhaps you mean the reverse
8 order?

9 A. I'm sorry.

10 Q. Do you mean APS zone forecast?

11 A. Yes.

12 Q. Line one on Page 15 ---.

13 CHAIRMAN:

14 The word forecast after the word zone
15 on page ---.

16 A. In between APS and zone.

17 BY ATTORNEY CALLAS:

18 Q. No. What is --- what is said between zone and
19 two. Okay. All right. And do you have any corrects to
20 make to Rebuttal testimony?

21 A. Yes. On page 11, line eight, after the question
22 mark, there's a quote, and that should be removed.

23 Q. Are those all your corrections?

24 A. They are.

25 Q. Thank you, Mr. Eberts. Now subject to those

1 corrections, are the --- are the answers in your Direct
2 and Rebuttal testimony true and correct to the best of
3 your knowledge, information and belief?

4 A. Yes, they are.

5 Q. And if I were to ask you those same questions
6 today, would your answers be the same subject to those
7 corrections?

8 A. Yes, they would.

9 ATTORNEY CALLAS:

10 Your Honor, with that, the Companies
11 move for the admission of Companies Exhibit BDE-D and
12 Companies Exhibit BDE-R into evidence.

13 CHAIRMAN:

14 All right. Without objection and
15 subject to Cross Examination, they'll be admitted.

16 CROSS EXAMINATION

17 BY ATTORNEY ROBERTS:

18 Q. Good afternoon, Mr. Eberts.

19 A. Good afternoon.

20 Q. You're manager of load forecasting for
21 FirstEnergy?

22 A. For FirstEnergy Service Company, yes.

23 Q. And what does your position entail?

24 A. I do the load forecast, which is the energy and
25 peak forecast, as well as the revenue forecast. And I

1 help prepare integrated resource plans. I provide the
2 forecast for those when needed. But generally, my job is
3 just providing the forecast.

4 Q. And would you be providing --- or have you
5 provided a revenue forecast for the Harrison plant ---
6 for the Pleasants plant? Sorry.

7 A. I have not provided a revenue forecast for the
8 Harrison plant --- or the Pleasants plant. Thanks.

9 Q. I'm contagious. Sorry.

10 A. Yes.

11 Q. Are you the person that is the contact with PJM
12 concerning their load forecast?

13 A. My group talks to them about their forecast, is
14 in contact with them regarding their forecast.

15 Q. And was it your group that recently spoke with
16 John Reynolds in the forecasting department of PJM about
17 the PJM load forecast?

18 A. When you say recently talked to them, I'm not
19 sure what you said ---.

20 Q. This fall, in the last couple of months?

21 A. This fall?

22 Q. In the last couple of months.

23 A. I don't know all the contact my staff has with
24 the PJM or PJM staff on a ---.

25 Q. All right. Well, ---.

1 A. On a normal basis, we are in contact with them.

2 Q. So are you familiar with the PJM load
3 forecasting process?

4 A. Yes.

5 Q. And what happens in July of every year with PJM
6 load forecasting?

7 A. I can't say what happens every year.

8 Q. Do they contact the --- do they contact you or
9 your group in July of every year in preparation for their
10 2000 --- their next year's load forecast?

11 A. On a normal basis, PJM, the committee, sends out
12 notices to have meetings and such. If you're saying do
13 they contact us personally, ---

14 Q. Yes.

15 A. --- I would say no. We're part of a
16 subcommittee. We're part of a group and we're --- we
17 attend meetings with PJM, the subcommittee.

18 Q. So when PJM provides its load forecast, does it
19 reach out to FirstEnergy every year to get information on
20 load within the FirstEnergy system?

21 A. Could you please explain what you mean by load?

22 Q. On load or load changes that the Company
23 experiences or expects in the near term?

24 A. Are you referencing like individual customers or
25 are you talking about --- I'm ---?

1 Q. Yes, any load, whether it's to notify them of
2 individual customer additions or changes in growth. Do
3 you --- do you provide information to PJM every year in
4 preparation of their load forecast about changes to load
5 in your service territory?

6 A. PJM has load --- they have metered load. They
7 have their information. And on a --- I don't know about
8 every year, but we provide information on large changes
9 or changes to customers that could impact the PJM load.

10 Q. And when is that provided to PJM?

11 A. Late summer, early fall.

12 Q. Okay. And do you respond to those inquiries or
13 does someone on your team respond to them?

14 A. My team responds to them.

15 Q. But you're aware of what your team is telling
16 PJM?

17 A. Yes.

18 Q. Is that accurate?

19 A. Yes.

20 Q. Okay. Okay. So you've projected a 2.5 percent
21 growth rate over the next ten years for Mine Power.

22 A. The West Virginia companies --- we've projected
23 that ---

24 Q. Yes.

25 A. --- for the West Virginia companies.

1 Q. Yes. And PJM's load projection for APS West
2 Virginia --- for APS is 0.3 percent; isn't that correct?
3 It's 0.3 percent growth.

4 A. The APS zone over that time period, that's what
5 PJM has projected for the APS zone.

6 Q. Okay. So you testified that West Virginia is 35
7 percent of the APS zone?

8 A. Correct.

9 Q. So if the Companies are 35 percent of the APS
10 zone, using your growth rate, what would the APS zone
11 growth rate be as compared to the 0.3 percent PJM has
12 forecast?

13 A. I don't understand the question.

14 Q. Let me help.

15 ATTORNEY ROBERTS:

16 I would like this document marked CAD
17 Cross ---

18 CHAIRMAN:

19 Twelve (12).

20 ATTORNEY ROBERTS:

21 --- 12. Thank you.

22 (CAD Exhibit Cross-12 marked for
23 identification.)

24 A. Thank you.

25 ATTORNEY ROBERTS:

1 I have this document because I thought
2 it might be easier to see what I was asking than to
3 describe ---

4 CHAIRMAN:

5 I have two. Are they the same?

6 ATTORNEY ROBERTS:

7 --- what I was asking.

8 CHAIRMAN:

9 All right. What did you say?

10 ATTORNEY ROBERTS:

11 I said I had this document prepared
12 because I thought it might be easier to see what I was
13 asking than to --- simply for me to describe what I was
14 asking.

15 BY ATTORNEY ROBERTS:

16 Q. What I'm trying to determine is if your growth
17 rate is accurate, what would the growth rate be for the
18 APS zone?

19 And if you can see here, I call this Solve for
20 X. Is this an accurate way to determine, assuming your
21 growth rate in 35 percent of the zone, what the PJM ---
22 entire APS zone growth rate would be?

23 A. No. I don't believe so. I think because of the
24 things I've spelled out in my testimony about what PJM is
25 assuming in their forecast for the APS zone versus what I

1 have for the West Virginia companies, it doesn't make
2 sense.

3 Q. Well, if you're assuming a growth rate for West
4 Virginia of 2.5 percent, ---

5 A. Uh-huh (yes).

6 Q. --- and PJM is assuming a growth rate for the
7 APS zone of .3 percent, wouldn't it be able to calculate
8 --- wouldn't you be able to calculate what the growth
9 rate for the entire APS zone would be using ---
10 extrapolating from your forecast?

11 A. I'll still say no. Let me --- I don't
12 understand the question, but let me turn to my Rebuttal
13 testimony.

14 Q. That's fine.

15 A. Okay.

16 Q. If you could just tell me where you are?

17 A. Okay. I'm in the --- page three, and it's going
18 through the different areas of why the APS zone versus
19 the West Virginia forecast is different ---

20 Q. That's right.

21 A. --- than my forecast.

22 Q. I recall that.

23 A. Okay. And so one, it's --- yeah, the zone is
24 entirely different, talking different areas. And then
25 the next area is the amount of solar inside of the APS

1 zone is --- well, I'll get the numbers here so I don't
2 --- there's 319 megawatts by 2031. And the amount of ---
3 in West Virginia is eight percent --- or eight megawatts.
4 And that's only roughly five percent, where the ---
5 again, we're comparing --- we're comparing a very small
6 percentage of solar reduction, almost, I guess, five
7 percent of the solar reduction in West Virginia versus
8 the 35 percent that the energy represents in the --- in
9 the APS zone. Let me start that over again. All right.

10 In the --- in the --- in 2031, PJM has projected
11 that the APS zone will drop by 319 megawatts, which is a
12 three-and-a-half percent reduction to the APS zone.

13 PJM has expected to reduce the West Virginia
14 companies by eight megawatts, which is --- I want to make
15 sure I get the right percentage here --- a .2 percent
16 reduction.

17 So the APS zone gets a three-and-a-half percent
18 reduction. West Virginia gets .2 percent. And that's
19 roughly five percent or --- so that is a very, very small
20 percentage of the 35 percent.

21 Q. Well, ---.

22 A. That's one item. The other item is we've
23 included some shale growth. We've included the Procter
24 and Gamble plant. All of those plants have added load
25 into the West Virginia companies. But PJM has only

1 included part of the shale and part of the --- they
2 didn't include the Procter and Gamble plant. Again
3 that's --- that's taking away ---.

4 CHAIRMAN:

5 And that's all set out in your
6 testimony.

7 A. Yeah, it is. It's set out in my testimony.

8 BY ATTORNEY ROBERTS:

9 Q. Mr. Eberts, I understand your explanation of the
10 differences between your load forecast and PJM's load
11 forecast. That's not the question I'm asking.

12 I'm asking you to assume that your load forecast
13 for West Virginia is correct. And if your load forecast
14 for West Virginia is correct, regardless of what PJM does
15 your load forecast is correct, what would the load growth
16 have to be in all of APS to make a 2.5 percent growth
17 rate in West Virginia work?

18 A. Uh-huh (yes).

19 Q. That's what CAD Cross-12 is.

20 CHAIRMAN:

21 Is this --- it's just trying to get him
22 to admit that there's a proportion, right, 2.5 to 35 as X
23 is to 100?

24 ATTORNEY ROBERTS:

25 I'm trying to get him to say using his

1 assumptions ---.

2 CHAIRMAN:

3 It would have been a lot easier to do
4 that than do all this, but that's fine.

5 ATTORNEY ROBERTS:

6 Well, I didn't want him to have to
7 calculate it on the stand. But I want --- I'm asking
8 using his --- assuming his forecast is right, then the
9 APS on growth rate would have to be 7.14 percent. That's
10 what X is. That would be the growth rate that PJM ---
11 that would apply to all of the APS zone.

12 A. And just to clarify, just one more thing is the
13 --- what PJM has for the APS zone growth is different
14 than what I have for the APS zone growth.

15 BY ATTORNEY ROBERTS:

16 Q. We know that.

17 A. Uh-huh (yes).

18 Q. Right? That's what this is all about.

19 A. Even in --- in the entire APS zone, if I
20 forecasted for the whole APS zone, it's different than
21 what PJM gets as well, even outside of West Virginia.

22 Q. I understand that. So do you --- are you
23 disputing that, assuming your forecast is right, that the
24 growth for all of the APS zone would have to be 7.14
25 percent for all of the APS zone if for 35 percent of the

1 zone for West Virginia it's 2.5 percent.

2 ATTORNEY CALLAS:

3 Your Honor, I feel like this question
4 has been asked and answered.

5 CHAIRMAN:

6 I agree with you. I mean, I think he
7 explained to you why he doesn't think that's --- you
8 know, it's just the statement of your ---.

9 ATTORNEY ROBERTS:

10 No. He explained why he doesn't think
11 the PJM forecast is like his forecast. And what I'm
12 asking him is if we assume his forecast is right, what
13 would the load growth be for the entire APS zone? It's
14 completely different.

15 ATTORNEY CALLAS:

16 And I'm hearing the witness explain
17 that we're talking about two different forecasts or
18 different geographic areas and we're --- we're trying to
19 compare apples and oranges.

20 ATTORNEY ROBERTS:

21 No, he didn't say that.

22 ATTORNEY CALLAS:

23 Those were, of course, my words, but
24 it's what I'm --- my takeaway from the witness.

25 CHAIRMAN:

1 Well, you've asked him about it several
2 times and he's given you answers. Let's just move on. I
3 mean, you can do your calculation. We'll admit CAD
4 Cross-12 for whatever probative value it has.

5 ATTORNEY ROBERTS:

6 Thank you.

7 CHAIRMAN:

8 Which is --- I won't comment on.

9 BY ATTORNEY ROBERTS:

10 Q. Isn't it your obligation as load --- manager of
11 load forecasting for FirstEnergy Services Corporation to
12 make sure you or your team provides every year to PJM
13 information known to you about any proposed adjustments
14 to the load analysis PJM prepares?

15 A. No. I don't think that's my obligation.

16 Q. Does PJM solicit annually from you and/or your
17 team load shifts, positive or negative, which you know
18 about which may be unknown to PJM?

19 A. Yes.

20 Q. All right. So you would have told PJM about
21 Procter and Gamble, would you not?

22 A. Yes.

23 Q. You would have told PJM your expected load
24 growth of 2.5 percent, would you not?

25 A. No.

1 Q. And you would have provided to PJM, would you
2 not, any load changes which you thought should be brought
3 to their attention?

4 A. We did provide them load changes that we thought
5 should be brought to their attention.

6 Q. Didn't include Procter and Gamble?

7 A. Yes.

8 Q. Oh, it did include Procter and Gamble? All
9 right. So the only way PJM wouldn't know about load
10 changes in your service territory is if you didn't tell
11 them. Do you agree with that?

12 A. Could you repeat the question?

13 Q. So the only way PJM wouldn't know about load
14 changes in your service territory, the load changes you
15 went to great length to describe in your testimony, would
16 be if you didn't tell PJM?

17 A. I don't know if there's any other ways that PJM
18 can find out that information.

19 Q. But that's ---.

20 A. I know what we give them, but I don't know ---
21 PJM, I'm sure, has other sources that they could ---.

22 Q. Well, I'm sure they do, too. But you're saying
23 things are happening in West Virginia that PJM doesn't
24 know about. Isn't that your testimony?

25 A. Could you repeat that question?

1 Q. But in your testimony aren't you saying that
2 things are happening in MonPower service territory that
3 PJM doesn't know about?

4 ATTORNEY CALLAS:

5 Could counsel provide a page and line
6 number?

7 ATTORNEY ROBERTS:

8 No.

9 A. It's the part that PJM doesn't know about --- is
10 where I'm not sure I can answer the question.

11 BY ATTORNEY ROBEERTS:

12 Q. Okay.

13 A. I'm don't know what PJM knows --- knows about.

14 Q. Okay. Let me restate that question.

15 A. Thank you.

16 Q. That's fair. So the only way you would know
17 that PJM was aware of important load changes in West
18 Virginia was if you told them; correct?

19 A. I don't think that made it any better because
20 it's still --- still assuming that I'm --- I'm --- I know
21 what PJM knows about.

22 Q. All right. I'd like to give you a document
23 marked CAD Cross-13 for identification.

24 (CAD Exhibit Cross-13 marked for
25 identification.)

1 BY ATTORNEY ROBERTS:

2 Q. And it's entitled, PJM Manual 19, Load
3 Forecasting Analysis, Attachment B: Load Forecast
4 Adjustment Guidelines. Have you seen this before, Mr.
5 Eberts?

6 CHAIRMAN:

7 Hold on. We're --- CAD Cross-13 is an
8 Attachment B to a load forecast adjustment guidelines to
9 the, I guess, PJM Manual 19, Load Forecasting Analysis
10 Manual; is that correct?

11 ATTORNEY ROBERTS:

12 Yes.

13 ATTORNEY CALLAS:

14 Your Honor, it appears to include
15 Attachment C as well, or at least a portion.

16 ATTORNEY ROBERTS:

17 Well, we can remove Attachment C if you
18 want. Mine does not --- that may have been a mistake.

19 CHAIRMAN:

20 All right. It has only Attachment B?

21 ATTORNEY ROBERTS:

22 Only Attachment B, Your Honor.

23 CHAIRMAN:

24 All right.

25 BY ATTORNEY ROBERTS:

1 Q. What is this document, Mr. Eberts?

2 A. This is the partial --- well, it's out of PJM
3 Manual 19, Load Forecasting Analysis, Attachment B, and
4 it's the load forecast Adjustment Guidelines.

5 Q. And are you aware of these load forecast
6 adjustment guidelines?

7 A. Yes.

8 Q. And you would be aware of them as manager of
9 load forecasting for FE Service Corp.; isn't that
10 correct?

11 A. Correct.

12 Q. So the very first sentence identifies the
13 intention of these guidelines. And am I accurate in
14 summarizing that these guidelines are to ensure that
15 adjustments made to the PJM load forecast are properly
16 identified, estimated and reviewed prior to incorporation
17 in the forecast? That's the summary of the first
18 sentence, isn't it?

19 CHAIRMAN:

20 Are you asking him if he read that
21 sentence correctly or are you asking ---

22 ATTORNEY ROBERTS:

23 I asked him if ---.

24 CHAIRMAN:

25 --- him to assert to the truth of what

1 that says?

2 ATTORNEY ROBERTS:

3 I didn't read it. I asked him if I
4 summarized it correctly.

5 A. Can you repeat that?

6 BY ATTORNEY ROBERTS:

7 Q. What does the first sentence say?

8 A. The intention of these guidelines is to ensure
9 that any adjustment made to PJM's load forecast model are
10 properly identified, estimated and reviewed prior to the
11 --- to incorporation into the forecast.

12 Q. And do you see right below that it says issue
13 identification? Have you had an opportunity to read the
14 issue identification section?

15 A. Do you want me to read it now?

16 Q. No. I just asked if you'd had an opportunity to
17 read it.

18 A. I've read it ---

19 Q. Okay.

20 A. --- in the past.

21 Q. Okay. So you're familiar with it?

22 A. Well, it's been a while but ---.

23 Q. Okay. Okay. And it seems to me that the
24 purpose of the issue identification is to make sure that
25 PJM has important information for their forecast. Is

1 that a fair statement?

2 A. I'll have to reread it to see if that's the
3 case.

4 CHAIRMAN:

5 I don't understand exactly what you're
6 doing. I mean, you're asking the witness if your
7 summarization of the issue identification as set forth is
8 accurate?

9 ATTORNEY ROBERTS:

10 No. I'm asking him what the purpose of
11 it is.

12 CHAIRMAN:

13 Huh?

14 ATTORNEY ROBERTS:

15 I'm asking him what the purpose of the
16 issue identification is.

17 CHAIRMAN:

18 I guess if he knows he could tell you.

19 A. Pardon?

20 CHAIRMAN:

21 She asked if you knew the purpose of
22 the issue identification language. That's my
23 understanding of what she's asking. And you said you
24 read it sometime earlier and ---.

25 A. Yes, I have read it before.

1 ATTORNEY ROBERTS:

2 He's reading it again.

3 CHAIRMAN:

4 Huh?

5 ATTORNEY ROBERTS:

6 Just let me know when you're finished
7 reading it.

8 A. All right.

9 BY ATTORNEY ROBERTS:

10 Q. In this paragraph, would you be an EDC?

11 A. Yes, MonPower would be an EDC.

12 Q. Okay. Good.

13 A. And Potomac Edison.

14 Q. Okay. That --- that clears up one issue.

15 A. Uh-huh (yes).

16 Q. And the purpose of this is for the EDCs to tell
17 PJM what information they have about their service
18 territories for inclusion in the PJM load forecast.
19 Would you agree with that?

20 A. For the inclusion of that into their forecast?

21 Q. Yes.

22 CHAIRMAN:

23 You're saying that's what that says?
24 Because it doesn't say that.

25 ATTORNEY ROBERTS:

1 No, it doesn't. I'm asking him a
2 question. I'm asking him the purpose.

3 CHAIRMAN:

4 The purpose of the PJM document?

5 ATTORNEY ROBERTS:

6 The purpose of the issue identification
7 to PJM's load forecast.

8 CHAIRMAN:

9 Okay.

10 A. Restate your question, please.

11 BY ATTORNEY ROBERTS:

12 Q. This PJM manual indicates --- tell me if you
13 disagree with me --- that PJM solicits every year from
14 EDCs, which would MonPower and PE, load shifts which are
15 known to the EDC that may be unknown to PJM. Would you
16 agree with that?

17 A. I'm just making sure that I have the --- about
18 the unknown to PJM, but ---.

19 Q. Yes, unknown to PJM.

20 A. They may or may not know it, but ---.

21 Q. Well, they may or may not know, but ---

22 A. Uh-huh (yes).

23 Q. --- it seems to me the purpose of this is for
24 them to get as much information as possible ---

25 A. Uh-huh (yes).

1 Q. --- from MonPower and PE when they're doing
2 their load forecast. Does that seem fair to you?

3 A. Yes.

4 Q. Okay. And it says here that PJM since this
5 request to you or your team in mid-July, and that you're
6 expected to respond for any proposed adjustments in
7 October and November. Is that your experience?

8 A. The request comes through a --- it's a
9 PowerPoint presentation. And on that PowerPoint
10 presentation, it says the EDC should send the information
11 to them.

12 Q. It does. And it --- and it specifically asks,
13 doesn't it, on line two of the first little dot, for
14 large load shifts; is that correct? Right after EDC in
15 parentheses.

16 A. It does say large load shifts.

17 Q. But the second little dot allows for you as an
18 EDC to provide to PJM any other load changes you want to
19 bring to their attention; is that correct?

20 A. Where did you read that from? What ---?

21 Q. Second little dot.

22 A. Yes.

23 Q. So that the only reason PJM's forecast would
24 exclude all the information you testified to about
25 Procter and Gamble or any other customers they don't know

1 about would be if you don't tell them consistent with
2 their manual requirements; correct?

3 A. Going back to the first dot, it does say but may
4 be unknown to PJM. So PJM may or may not know.

5 Q. All right. But they may or may not know, but
6 you would want to tell them whatever information you
7 have, wouldn't you, that may affect their load forecast?

8 A. Yes. We would provide that information to them.

9 Q. Okay. And if you didn't provide that
10 information to them --- so that if PJM was not aware of
11 the many items you discuss in your testimony that affect
12 MonPower's load forecast, it would be because you didn't
13 tell them or they already knew, one of those?

14 A. Or they already knew, yes.

15 ATTORNEY ROBERTS:

16 Okay. I have no further questions.

17 CHAIRMAN:

18 I don't see --- I'm having trouble with
19 this document because while I suspect what you're saying
20 is true, this doesn't put any --- as I read it, it simply
21 says that PJM will annually solicit it. It doesn't say
22 that they've got --- they're under any obligation to
23 necessarily provide it. Now, maybe they are, but that's
24 not what this document says. You're asking him if he's
25 been doing it. I don't see this, just what you read

1 there, imposing such a requirement.

2 ATTORNEY ROBERTS:

3 I think that's irrelevant to his
4 testimony, and I'll tell you why. Because Mr. Eberts is
5 claiming that his forecast is so much better than PJM's
6 forecast because PJM doesn't know any of this stuff.

7 CHAIRMAN:

8 It doesn't have nothing to do with my
9 --- what you're asking him for is does this impose
10 requirements on him? I don't see that in the language.
11 The only way it gets there is if you interpret it that
12 way.

13 ATTORNEY ROBERTS:

14 Well, it's part of the PJM manual. It
15 is a requirement.

16 CHAIRMAN:

17 Okay. I don't know. That's not here
18 and I don't --- I'm not an expert on the PJM manual. I'm
19 just sitting here looking at what you were reading from
20 and I don't honestly see any requirement in here. It
21 says they'll solicit it and when they will send it. And
22 it may be unknown to PJM, but I don't see it says you
23 will immediately provide us with that information.

24 ATTORNEY ROBERTS:

25 I understand what you're saying, Your

1 Honor. But his testimony is that PJM has an inferior
2 load forecast because they can't possibly know any of
3 these things that he's put in his load forecast. And
4 what I'm saying is if PJM doesn't know any of these
5 things that he thinks are important in his load forecast,
6 it's because he didn't tell them.

7 Under the manual, he has an opportunity
8 every year to tell him --- tell them --- PJM all the
9 expected changes to their load forecast.

10 CHAIRMAN:

11 You and I can argue about this. I
12 mean, I'm not --- if MonPower is not upset with this, go
13 ahead and stick it in. But I mean, I --- I'm just --- my
14 question is --- I'm trying to keep the record straight
15 and what you're --- the way you're characterizing this
16 doesn't --- is not consistent with the language of it.
17 That's all. All right.

18 ATTORNEY ROBERTS:

19 I have no further questions.

20 CHAIRMAN:

21 Okay.

22 ATTORNEY CALLAS:

23 Your Honor, at the appropriate time the
24 Companies will be objecting to CAD Cross-13.

25 ATTORNEY ROBERTS:

1 I'm sorry? I'm sorry. I didn't hear
2 you.

3 ATTORNEY CALLAS:

4 Well, if now is the time I will
5 eventually --- or if later is the time, I will be
6 objecting to the admission of CAD Cross-13.

7 ATTORNEY ROBERTS:

8 Well, let's --- well, I've already
9 moved to have it entered into the record, so ---.

10 ATTORNEY CALLAS:

11 And I object.

12 CHAIRMAN:

13 What's the basis of your objection?

14 ATTORNEY CALLAS:

15 I think it hasn't been used with the
16 witness in any --- any productive way frankly, that
17 there's --- it's unclear what it adds to the record.
18 It's a portion of a --- of a larger manual taken out of
19 context. I mean, the manual to the extent it is already
20 referenced in Mr. Eberts' testimony, which it may be,
21 should be in the record in its entirety. But, you know,
22 this really adds nothing to it.

23 ATTORNEY ROBERTS:

24 And my response is the witness said he
25 was familiar with these provisions. It'd been a long

1 time since he read them, but he was ---.

2 CHAIRMAN:

3 That's true. He did say that.

4 ATTORNEY ROBERTS:

5 He was familiar with them and he did
6 recognize them. And, you know, in these kinds of
7 proceedings you can admit it into ---.

8 CHAIRMAN:

9 What kinds of proceedings?

10 ATTORNEY ROBERTS:

11 I'm sorry, in administrative
12 proceedings you can admit it and take it for what it's
13 worth. It goes to the weight, not to the admissibility.

14 CHAIRMAN:

15 Take it for what it's worth. All
16 right. We'll admit it for what it's worth.

17 ATTORNEY ROBERTS:

18 Thank you.

19 ATTORNEY TAUBER:

20 Thank you, Your Honor.

21 CROSS EXAMINATION

22 BY ATTORNEY TAUBER:

23 Q. Good afternoon, Mr. Eberts. My name is Jill
24 Tauber. I'm an attorney representing West Virginia CAG
25 and West Virginia SUN. How are you?

1 A. Good. Good afternoon.

2 Q. Thank you. I have a few questions for you. You
3 discussed your role as manager of load forecasting with
4 Ms. Roberts. And I'd just like to clarify. You
5 mentioned that you prepared load forecasts for the
6 Companies. And I just want to clarify that's retail load
7 forecast; is that correct?

8 A. That is correct, the retail load forecast.

9 Q. And in this case, you provide forecasts of the
10 Companies' peak demands over a 15 year period; is that
11 correct?

12 A. We prepare --- I prepare, my group prepares a
13 forecast for planning purposes inside the Company for the
14 Companies' purposes. And then in --- in this case
15 they've taken my forecast, my most recent forecast, and
16 used it in this case.

17 Q. And it was for peak demands over a 15-year
18 period; is that correct?

19 A. That's correct.

20 Q. And that forecast includes winter and summer
21 peak demand estimates; is that correct?

22 A. Yeah. The forecast I create, it has all the
23 months, but they pick the peak in the summer and the
24 winter.

25 Q. Mr. Eberts, you're familiar with the Companies'

1 petition presented in this case?

2 A. Yes, yes.

3 Q. Do you have that in front of you?

4 A. I do not.

5 Q. Now, I'm going to ask you some questions. I
6 don't think you're going to need to refer to it, but if
7 counsel has a copy of the Companies' petition for the
8 witness that might be helpful for efficiency purposes.

9 ATTORNEY CALLAS:

10 I believe it's in the binder.

11 A. Okay.

12 BY ATTORNEY TAUBER:

13 Q. And again, I'm not going to direct you there
14 now, but in case we have to. Now in this case, the
15 Companies have presented to the Commission a forecasted
16 capacity shortfall; is that correct?

17 A. Correct. I did not, but yes.

18 Q. And the capacity shortfall is the difference
19 between the forecasted capacity requirement and available
20 resources; is that correct?

21 A. I've never used those terms before, but it's
22 --- it's based on the --- my load forecast plus a reserve
23 margin and compared to --- I forget your term that you
24 used.

25 Q. Available capacity resources?

1 A. Yes.

2 Q. Okay. And that's what --- Mr. Eberts, what I'm
3 getting at, the forecasted capacity requirements, that's
4 basically your load forecast; right? That's where it's
5 coming from?

6 A. My load forecast plus a reserve margin.

7 Q. Okay. So the Companies are forecasting a
8 capacity requirement of 3,988 megawatts in 2020; is that
9 correct? And I can refer you if it's helpful ---

10 A. Okay.

11 Q. --- to either the petition at page four or your
12 Direct testimony at page three, where you also discuss
13 this.

14 A. I'm in my Direct testimony. Could you
15 please ---

16 Q. Sure.

17 A. --- ask the question again?

18 Q. Yes. So why don't I direct you, sir, to help
19 move things along, to page three, lines 11 through 12.
20 And without sort of reading it, just in sum, what you're
21 saying here is there is a --- when you adjust the winter
22 peak for the reserve margin, you have --- in 2020 you're
23 forecasting 398 --- I'm sorry, 3,988 megawatts? And in
24 2027 4,375 megawatts; is that correct?

25 A. We based it on the PJM year. So the 2020 to

1 2021 is probably more of a January 2021 peak, ---

2 Q. Okay.

3 A. --- as well as the 2028 peak and the 2027 slash
4 2028 time frame.

5 Q. So this --- these would be for those years, for
6 that PJM year, this is the Companies' forecasted capacity
7 requirement; is that correct?

8 A. It's my forecast plus a reserve margin of 16.6
9 added to it.

10 Q. Okay. Why don't I --- just to confirm, if I can
11 have you turn to page four of the petition, and you can
12 tell me when you're there. I don't want to jump ahead
13 too far.

14 A. I'm there.

15 Q. Great. So under Subsection A, MonPower's
16 resource adequacy situation, would you agree with me,
17 after reviewing the first few sentences, that the
18 Companies have a forecasted capacity requirement in 2020
19 and in 2027 of the numbers we just went over, which is
20 3,988 megawatts and 4,375 megawatts?

21 A. Yes.

22 Q. Okay. Great. If I could, Mr. Eberts, let's
23 turn to your Exhibit BDE 1 in your Direct testimony.

24 A. I'm there.

25 Q. Now, this provides --- this exhibit provides

1 historical and forecasted peak load demand for the
2 Companies; is that right?

3 A. Yes.

4 Q. Now, turning to the last column of this exhibit,
5 the figures that appear for years 2020-2021, and
6 2027-2028, those figures are the ones we just discussed,
7 is that correct, the capacity requirements for the
8 Companies?

9 A. Yes.

10 Q. Okay. And this last column, what this is
11 reflecting, if I understand the exhibit correctly, is
12 winter peak demand plus a reserve margin; is that right?

13 A. That's correct.

14 Q. And the second to last column, that's reflecting
15 peak summer demands in a reserve margin; is that right?

16 A. Correct.

17 Q. So what your group does is, you're forecasting
18 the summer and winter peak demands, and you're adjusting
19 them to include a reserve margin?

20 A. That's correct.

21 Q. Okay. And as indicated, if we looked at the
22 bottom of this exhibit, the line there indicates that
23 you're using a reserve margin of 16.6 percent; is that
24 correct?

25 A. That is correct.

1 Q. So when you're adding the --- that percentage of
2 a reserve margin, Mr. Eberts, the forecasted peak demand
3 essentially increases by 16.6 percent; is that right?

4 A. That is correct.

5 Q. Okay. So if we take, for example, the --- what
6 I'm going to sort of call the middle couple columns, peak
7 demand summer and winter, if I take that summer column,
8 multiple it by 16.6 percent, add that, that's what's
9 going to give us peak demands plus reserve margin; is
10 that right?

11 A. Correct.

12 Q. Okay. Great. Now, you discuss this in your
13 Direct testimony --- and I'll give you a citation just so
14 you can follow it, page 3, lines 9 to 11. But generally
15 speaking, you would agree with me that reserve margins
16 are required by PJM to offset forced outages --- outages
17 and generation resources; is that right?

18 A. It's --- it's a general type of thing. What I
19 forecast is a peak forecast. And that's what we have, I
20 guess, off --- off the shelf. And in an Integrated
21 Resource Plan or when you calculate any of this, you ---
22 you need to add some reserve margin to account for those.

23 Q. And the reserve margin as required by PJM, the
24 purpose of it, as you noted in your Direct testimony,
25 would be to offset forced outages in generation

1 resources; is that right?

2 A. That's what --- yeah, that's what I said in my
3 testimony.

4 Q. And in determining how much capacity is needed
5 to ensure reliability, PJM provides --- or excuse me, PJM
6 applies a reserve margin on top of their forecasted peak
7 load; is that right?

8 A. That is correct, they --- yes.

9 Q. I'm going to refer you back briefly, Mr. Eberts,
10 to your Exhibit BDE 1 again. You let me know when you're
11 there.

12 A. I'm there.

13 Q. Okay. Great. The 16.6 reserve margin that you
14 use, this exhibit states that it's from PJM's 2016
15 reserve requirement study. Do you see that?

16 A. Yes, I do.

17 Q. And specifically, it's from page 14, Table 1-2.
18 Do you see that?

19 A. I do.

20 ATTORNEY TAUBER:

21 Okay. I'd like to mark a document,
22 Your Honor. And I think that would be CAG-SUN Cross
23 Exhibit 8.

24 (CAG-SUN Exhibit Cross-8 marked for
25 identification.)

1 CHAIRMAN:

2 Yes, it would be.

3 ATTORNEY TAUBER:

4 Okay. Thank you.

5 BY ATTORNEY TAUBER:

6 Q. And the title of this document is 2016 PJM
7 Reserve Requirement Study?

8 A. Yes. It's a partial document with maybe five
9 pages, but it's not the whole document.

10 Q. Certainly, yes. And so would you agree that
11 this is an excerpt of the reserve margin study that you
12 cited in your exhibit?

13 A. Yes.

14 Q. Okay. Now, could we go to page 14, which is
15 included in this excerpt, Table 1-2?

16 A. Yes.

17 Q. Now, if you look at Column A, am I right that's
18 where the 16.6 percent comes from that you used in your
19 Appendix BDE-1?

20 A. It is.

21 Q. Okay. So the 16.6, as stated in this PJM study,
22 it states that it's IRM, PJM, RTO percentage. Do you see
23 that column header?

24 A. I see the column header.

25 Q. Okay. Now, IRM stands for installed reserve

1 margin; is that correct?

2 A. Correct.

3 Q. Okay. And IRM is expressed in units of
4 installed capacity; is that correct?

5 A. Correct.

6 Q. Now, PJM's capacity auctions are conducted in
7 units of unforced capacity; is that correct?

8 A. Could you repeat the question, please?

9 Q. Certainly. PJM's capacity auctions are
10 conducted in units of unforced capacity, is that correct,
11 or UCAP for short?

12 A. Yes.

13 Q. Okay. Are you familiar with the term forecast
14 pool of requirements?

15 A. I'm familiar with that term.

16 Q. Okay. Why don't I refer you to page 20 of the
17 study of the PJM reserve requirement study, what's been
18 marked as Cross Exhibit 8? And I can have you take a
19 look at page 20, the second bullet, and just give you a
20 --- a moment to refresh your recollection of the term.

21 CHAIRMAN:

22 Could you pull your microphone down a
23 little bit?

24 ATTORNEY TAUBER:

25 Certainly. Thank you.

1 CHAIRMAN:

2 Thank you.

3 A. I've --- I've read it.

4 BY ATTORNEY TAUBER:

5 Q. You would agree with me, that forecast pool
6 requirements or FPR expresses the reserve requirement in
7 unforced capacity terms? Do you agree with that?

8 A. I'd agree with that. For the summertime, it
9 expresses it in those terms. But for the wintertime, I
10 would say it's more like in the bottom paragraph, which
11 was --- talk about the winter weekly reserve target of 27
12 percent. And if you apply the 27 percent in the same
13 type of formula that the --- that you just described on
14 the --- on the FPR, that calculation would be more in the
15 lines of 18.6 for the wintertime, but ---.

16 Q. Well, let's look at --- let's look at the FPR
17 recommendations here. You see that it says the approved
18 IRM or installed reserve margin is converted to the FPR
19 for use in determining capacity obligations. Do you see
20 that?

21 A. I see that for the summertime.

22 Q. It doesn't say summertime in this, just to
23 clarify; is that correct?

24 A. Not in this recommendation.

25 Q. Okay.

1 A. But it's --- but the --- in the --- the prior
2 page, I believe it does.

3 Q. Okay.

4 A. The IRM is calculated based on the summer peak.

5 Q. That's right, it is; isn't that right?

6 A. Uh-huh (yes).

7 Q. So PJM calculates their peak based on the
8 summer; is that right?

9 A. That's correct.

10 Q. Okay. And the FPR expresses the reserve
11 requirement of unforced capacity to them. We talked
12 about that. And PJM acquires capacity to fill its
13 obligations in unforced capacity terms. That's correct;
14 right?

15 A. That is correct.

16 Q. So you're aware that to determine capacity
17 obligations, PJM converts the installed reserve margin to
18 the forecast pool requirement?

19 A. Yes. Yeah.

20 Q. Now, before my next question, I'm just going to
21 have you look --- read to me --- to the next page of this
22 excerpt, which is provide the definition of forecast pool
23 requirement.

24 A. Yes.

25 Q. Great. Okay. So what I'd like to do is go back

1 to Table 1-2 on page 14, which was the basis of the
2 reserve margin used in your load forecast. And I'd like
3 you to take a look at Column E. Do you see Column E,
4 where it says forecast pool requirement, FPR, in the
5 column header?

6 A. I see that column.

7 Q. Okay. Do you see in 2017, the number is 0.0967?
8 Do you see that?

9 A. I see that.

10 Q. Do you see 1.0901 in 2018?

11 A. I see that.

12 Q. And finally, do you see 1.0892 for the rest of
13 the years through 2026?

14 A. Yes.

15 Q. Now, FPR or forecast pool requirements, it is
16 stated in a percent equal to 100 plus the percent reserve
17 margin. And you probably just read that in the
18 definition of the glossary. So what I just want to ask
19 you is are you seeing that the percent reserve margin
20 that PJM would use to determine capacity obligations is
21 8.92 for the 15-year planning period covered on this
22 table?

23 A. Again, this is talking about the summer. In
24 this case, we're dealing with the winter period. And I'm
25 --- we're --- as Jay Roberto had testified on --- he's

1 dealing with the --- the winter peak period. And on page
2 20, it talks about the 27 percent weekly reserve margin.
3 And if you apply that same equation to a weekly reserve,
4 it would come up to 18.6. And so the 16.6 that I've
5 included in my testimony is actually conservative to the
6 winter peak.

7 And what we've done here on the 16.6 or in the
8 IRP, we've historically used that as the margin in our
9 calculation.

10 Q. Mr. Eberts, PJM didn't approve a winter reserve
11 margin for procuring capacity, did it?

12 A. They approved a weekly reserve target.

13 Q. That's not a requirement for capacity auctions,
14 is it?

15 A. It's not a requirement for capacity auctions,
16 but it's a --- it's not an absolute requirement, but PJM
17 has to set it up. In the wintertime, they --- they have
18 to maintain those margins. The operators have to --- to
19 provide that 27 percent in the summertime. It's a weekly
20 minimum target.

21 Q. PJM doesn't specifically apply the installed
22 reserve margin to UCAP, does it?

23 A. Could you repeat that question?

24 Q. Certainly. PJM doesn't apply the installed
25 reserve margin to UCAP, does it?

1 A. Not that I'm aware of. I don't know.

2 Q. Okay. In addition to the demand forecast, you
3 also provided an energy requirements forecast; is that
4 right?

5 A. That's correct.

6 Q. And the energy requirements forecast is a --- is
7 one of the main components of the load peak demand
8 forecast; is that right?

9 A. That's correct.

10 Q. And that's partly because the Companies' peak
11 demand is highly correlated with energy sales?

12 A. That is correct.

13 Q. Okay. And you present your energy requirements
14 forecast in BDE-2; is that right?

15 A. That's correct.

16 Q. Okay. And this is in megawatt hours; is that
17 right?

18 A. Yes.

19 Q. Okay. These figures, Mr. Eberts, they don't
20 include a reserve margin; right?

21 A. That is correct.

22 ATTORNEY TAUBER:

23 Okay. I'd like to mark, with your
24 permission, Your Honor, three documents. I think it will
25 help for efficiency. I'm going to present them together.

1 CHAIRMAN:

2 You may.

3 ATTORNEY TAUBER:

4 And so those will be CAG-SUN Cross
5 Exhibits 9, 10 and 11.)

6 (CAG-SUN Exhibits Cross-9, Cross-10,
7 Cross-11 marked for identification.)

8 CHAIRMAN:

9 This would be 9?

10 ATTORNEY TAUBER:

11 Yeah.

12 BY ATTORNEY TAUBER:

13 Q. And for clarity of the record, I might suggest
14 for CAG-SUN Cross Exhibit 9, it would be the response to
15 CAG-SUN Document Request 14.

16 CHAIRMAN:

17 Wait a minute. Let us get them marked.

18 ATTORNEY TAUBER:

19 Sure. Yeah, yeah. Sorry for the ---.

20 OFF RECORD DISCUSSION

21 CHAIRMAN:

22 We have been handed three documents to
23 be marked as CAD-SUN --- CAG-SUN Cross Examination
24 Exhibits 9, 10 and 11. Do you want to identify which you
25 want marked as what?

1 ATTORNEY TAUBER:

2 Sure. I was just going to do them in
3 numeric order. So CAG-SUN 1-4 would be Cross Exhibit 9.

4 CHAIRMAN:

5 All right.

6 ATTORNEY TAUBER:

7 CAG-SUN 1-5 would be Cross Exhibit 10.
8 And CAG-SUN 2-15 would be Cross Exam 11.

9 CHAIRMAN:

10 All right.

11 BY ATTORNEY TAUBER:

12 Q. Mr. Eberts, ---

13 CHAIRMAN:

14 And the exhibits, they'll be marked
15 that way.

16 BY ATTORNEY TAUBER:

17 Q. --- do you recognize these documents?

18 A. Yes.

19 Q. And is your name the name that appears at the
20 top as the person who prepared these documents or had
21 them prepared under your supervision?

22 A. Yes.

23 Q. Okay. So in CAG-SUN 1-4 and 1-5, the request to
24 the companies was for the number of hours, historically
25 from 2012 to 2016, and then from 2017 to 2032, where the

1 customer load either exceeded custom --- the Companies'
2 generation capacity or is forecasted to exceed that. Do
3 you see that?

4 A. You said CAG-SUN 1-5?

5 Q. And 1-4. I was --- I apologize. I was trying
6 to be efficient. But we can break them down. 1-4, we
7 asked for that historical information from 2012 through
8 2016, and then for each available month of 2017. Do you
9 see that?

10 A. I see that.

11 Q. And then in 1-5, we ask for projections from
12 2017 to 2032, when customer load will exceed the
13 Companies' generation capacity. Do you see that?

14 A. Yes.

15 Q. Okay. And then the last document that I handed
16 you, 2-15, in Subpart B, we ask for the information that
17 we just went over, that we requested in those two prior
18 data requests, without adjusting the loads to include the
19 PJM reserve margin. Do you see that request in Subpart
20 B?

21 A. Yes.

22 Q. Okay. If I can have you turn the page to that
23 document, and let's go to Attachment B. So on the first
24 page here, under --- this is a printout of an Excel
25 spreadsheet, so it may not be too clear. But what I

1 think is row one, do you see the title Hours Exceeding
2 Generation Capacity?

3 A. Yes.

4 Q. And that's going to reflect hours when the
5 customer load either did or is projected to exceed
6 generation capacity; right?

7 A. Yes.

8 Q. Okay. So let's go to the with bath forecast.
9 And I believe that's sort of lining up with my Column D.
10 This column shows that for 2017, there are no hours in
11 the year where customer load is projected to exceed
12 generation capacity; is that correct?

13 A. Yes.

14 Q. For 2018, what this is telling me is that there
15 are no hours in that year where customer load is
16 projected to exceed generation capacity. Do you see
17 that?

18 A. Yes.

19 Q. And the same for 2019. Would you agree with
20 that?

21 A. Yes.

22 Q. So for the first three years of the forecast
23 here, there are no hours in which the Companies' energy
24 requirements are greater than MonPower's generation
25 capacity; is that right?

1 A. Yes. That's with ---.

2 Q. Okay. Now, let's go to 2020. In 2020, the
3 company projects that three hours of the 8,760 hours in
4 the year, for three of those hours energy needs will
5 exceed generation capacity. Do you see that?

6 A. Yes. Again, all these numbers are without any
7 reserve margin.

8 Q. Correct. Would you agree --- we can say that
9 subject to check, that three --- those three hours
10 amounts to roughly .034 percent of the year? Does that
11 sound right to you?

12 A. I can't do that in my head.

13 Q. Okay. Well, we'll --- that's okay. We'll ---.

14 CHAIRMAN:

15 We can get Ms. Roberts to do it.

16 BY ATTORNEY TAUBER:

17 Q. We'll do it later. We'll do it later. Let's go
18 to 2021. Do you see 24 hours listed in that column?

19 A. I see 24 hours listed in that column.

20 Q. Okay. So what that's saying again is for 34
21 hours of the year energy needs are projected to exceed
22 generation capacity; is that right?

23 A. Yes, assuming no ---

24 Q. Reserve?

25 A. --- reserve margin.

1 Q. Okay. So from 2017 to 2021, other than these 27
2 hours in the out years, the Companies will have an energy
3 surplus; is that right?

4 A. Can you repeat that question?

5 Q. Sure. For 2017 to 2021, other than the 27 hours
6 in the two out years, the Companies are projected to have
7 an energy surplus?

8 A. Assuming no reserve margin.

9 Q. Assuming no reserve margin. And just to
10 clarify, this is without factoring in any additional
11 generation that would be provided by Pleasants; correct?

12 A. That is correct.

13 Q. Okay. Are you familiar with the Companies' 2015
14 IRP?

15 A. Parts of it.

16 Q. Parts of it?

17 A. Uh-huh (yes).

18 Q. Okay. Well, I'm going to give you a part of it,
19 if that's okay?

20 A. Okay.

21 ATTORNEY TAUBER:

22 We're going to mark one last document
23 for identification. Thank you. And Your Honor, we're
24 going to provide an excerpt of a fairly lengthy document.
25 It's a Companies' filing to this Commission. If your

1 preference would be administrative notice, that would be
2 fine with us, however you would wish to proceed.

3 CHAIRMAN:

4 Okay. CAG-SUN Cross Examination
5 Exhibit 12.

6 (CAG-SUN Exhibit Cross-12 marked for
7 identification.)

8 ATTORNEY TAUBER:

9 Great.

10 BY ATTORNEY TAUBER:

11 Q. Mr. Eberts, I've handed you an excerpt of the
12 2015 IRP filed by the Companies. Do you see that?

13 A. Yes.

14 Q. And I would just like to turn, if I could, to
15 Figure 7, which is the last page of the excerpt. Do you
16 see that figure?

17 A. Yes.

18 Q. Okay.

19 A. It's small, but yes.

20 Q. I apologize. Yes, it is --- it is small. And
21 maybe we can look at that figure, and we can go to the
22 text above it. But you would agree with me, that what
23 this --- what this figure is telling us is that the
24 Companies are projecting to be long on energy through
25 2030; is that right?

1 A. That's what Figure 7 indicates, yes.

2 ATTORNEY TAUBER:

3 I have no further questions. And at
4 this time, I would move admission of CAG-SUN Exhibits 8
5 through 12, Your Honor. Thank you.

6 CHAIRMAN:

7 All right. Without objection, they'll
8 be admitted.

9 CROSS EXAMINATION

10 BY ATTORNEY WILLIAMSON:

11 Q. Good afternoon.

12 A. Good afternoon.

13 Q. Good afternoon. I'm Derrick Williamson with
14 WVEUG. Is it Eberts or Eberts (changes pronunciation)?

15 A. Eberts (corrects pronunciation).

16 Q. All right. I'll go with that.

17 A. Okay.

18 Q. How many ---?

19 A. I had to tell my attorney, too, so ---.

20 Q. How many times?

21 A. He's a fast learner.

22 Q. How many people are a part of your load
23 forecasting team?

24 A. Including me, eight.

25 Q. And do they work exclusively in load

1 forecasting?

2 A. In the load forecasting which was is also
3 revenue forecasting, yes. That's what they do.

4 Q. Do you do exclusively load forecasting or do you
5 also do revenue forecasting?

6 A. I'm responsible for the revenue forecasting as
7 well.

8 Q. Okay. In your Rebuttal testimony, you had
9 addressed Mr. Barron's position that there's at least a
10 risk that some portion of your projected load growth
11 could be offset by other sources of generation.

12 And mercifully, I am not going to go through the
13 entirety of your Rebuttal, but I do want to focus on one
14 statement that you made. And it's at the bottom of page
15 11 of your Rebuttal testimony. And it carries over to
16 the top, so starting --- essentially, starting on line 21
17 and then carrying over to page 12, line one. And I think
18 the essence of this particular statement is that onsite
19 cogeneration is always a risk. Would you agree with that
20 statement?

21 A. What I meant by that statement is there's out
22 --- there is a manager load of forecasting, I'll say, for
23 all the FirstEnergy utilities. We get from time to time
24 a possibility that a customer might install cogeneration.
25 And a lot of times it makes sense that they have a

1 process where they need generating and heat as well or
2 for some other process.

3 Q. Or for steam perhaps?

4 A. Or for steam, yes. And it makes sense, but it's
5 what I've experienced in my --- what I have experienced,
6 I'll call it few and far between, but it's out there.

7 Q. Sure. So your use of the word always wasn't
8 intended to mean constantly a risk; correct?

9 A. That's correct.

10 Q. But that risk could vary depending on
11 circumstances; correct?

12 A. Correct.

13 Q. And a circumstance that might cause that risk to
14 be more prevalent could be increased rates for the
15 customer; correct?

16 A. I would say the biggest increase risk is --- and
17 when I say risk, an impact on my forecast --- is when the
18 customer has an actual need, an alternative need, for the
19 heart from the cogeneration. I'm not --- I haven't
20 experienced too many because of rates. I think --- I
21 just don't remember a lot of generation being installed
22 because of rates.

23 Q. Sure. In your Direct testimony at page
24 eight ---.

25 A. Direct testimony?

- 1 Q. Direct testimony, page eight.
- 2 A. I'm there.
- 3 Q. Lines 16 through 19?
- 4 A. Yes.
- 5 Q. You talk about the adjustments that were made to
- 6 the forecast based on customer support representatives'
- 7 input?
- 8 A. Correct.
- 9 Q. Who are those customers support representatives?
- 10 A. By name or ---?
- 11 Q. Yes, if you know them, if it's not an exhaustive
- 12 list.
- 13 A. I don't know if I know all of them.
- 14 Q. Is Rodney Liston one of them?
- 15 A. Rodney Liston, Tim Troxel, I don't know if ---
- 16 I'm not sure if I can go through the list.
- 17 Q. For purposes of this load forecast, did you
- 18 speak with any of those customer service representatives
- 19 personally, or was there only dialogue between other
- 20 members of your load forecasting team and those customer
- 21 service representatives?
- 22 A. I have spoken to a couple of them and my staff
- 23 has spoken to more than that, but ---.
- 24 Q. At page nine, just following along, you talk
- 25 about the types of information that the customer support

1 reps are eliciting including what you refer to as
2 slowdowns. What are slowdowns as you utilize that term
3 there?

4 A. Yes. Mainly, I would say going from a two or
5 three shift operation to a one shift operation. When
6 business slows down, that's the way I would refer to it,
7 mainly more shifts ---.

8 Q. I'm sorry. Were you finished?

9 A. Yeah. It's just --- mainly I would think of it
10 as the number of shifts.

11 Q. And how would you characterize an industrial
12 user that produces a product using multiple furnaces and
13 say has five furnaces and then decides it only can afford
14 to utilize four furnaces? Would you refer to that as a
15 slowdown or something else?

16 A. If they operated five furnaces in the past and
17 now they operate four?

18 Q. Yes, sir.

19 A. I think that's a slowdown as well.

20 Q. All right. And then following on in your
21 testimony there, lines eight through 13, I think this
22 essentially is describing the nature of the interaction
23 between the information that is solicited by the customer
24 service representatives, how it is shared with load
25 forecasting.

1 And then I want to focus on line 12. You say
2 that load forecasting then decides whether or not it
3 needs to adjust the model. What are the bases that you
4 utilized to decide whether to include the information
5 that has been solicited?

6 A. Yeah. So as I mention in my testimony, we
7 forecast by three areas, I'll call them PE West Virginia,
8 MonPower and West Virginia Power. And within those
9 areas, we do forecast segments of --- for various --- for
10 groups, for various segments, industrial segments.

11 And when we look at the economic growth compared
12 to the --- the economic growth from the models compared
13 to what our reps are telling us. We decide whether or
14 not that is included in the economic growth or is it
15 captured in the economic growth or not.

16 Q. And how do you make that ultimate decision?

17 A. Yeah. If it's a longer term --- I'll say steel
18 or somewhere where it's where we have a lot of history.
19 We can determine if it's --- if that economic impacts.
20 But if it's something like in the shale growth, the
21 economics might increase it by, I'll say, 50 megawatts.
22 And we know from the customer support rep we have 100
23 megawatts. So we would make that adjustment.

24 Q. And so if we look down to line 18 --- and you've
25 referenced it and there have been other comments made

1 about it --- the addition of two new industrial plants,
2 that was probably an easy addition to make?

3 A. Correct.

4 Q. Because the loads are pretty sizable; correct?

5 A. Correct.

6 Q. I understand. In preparation of the load
7 projection that is the topic of this case, in the
8 dialogue with the customer service representatives, was
9 there any discussion of customers approaching the
10 companies to pursue new interruptible rate options?

11 A. Not that I'm aware of, no.

12 Q. You mentioned it before. Were there any
13 discussions about customers approaching either Potomac
14 Edison or MonPower customer service representatives about
15 replacing onsite steam sources?

16 A. I'm not aware of any.

17 Q. Were there any customer inquiries discussed
18 between load forecasting and the customer service
19 representatives? Were there any customer inquiries
20 associated with requests to consider onsite or
21 cogeneration?

22 A. I'm not aware of any.

23 Q. Since it's sometimes a risk, did you give any
24 consideration to accounting for onsite cogeneration or
25 self-generation in the context of your load growth

1 forecast?

2 A. We did not adjust our forecast for that.

3 Q. And did you adjust your forecast for increased
4 demand response participation in the future?

5 A. I did not adjust the forecast for any demand
6 response, future demand response.

7 ATTORNEY WILLIAMSON:

8 All right. I have no more questions.
9 Thank you.

10 CHAIRMAN:

11 Mr. Hanna?

12 ATTORNEY HANNA:

13 No questions, Your Honor.

14 CHAIRMAN:

15 Mr. Rodecker?

16 CROSS EXAMINATION

17 BY ATTORNEY RODECKER:

18 Q. Good afternoon, Mr. Eberts.

19 A. Good afternoon.

20 Q. When did you prepare the --- strike that.

21 Did you prepare BDE-1 which is attached to your
22 Direct testimony?

23 A. Yes, under our --- yes.

24 Q. And when was that prepared?

25 A. In, I think, February.

1 Q. February of 2017?

2 A. Yes.

3 Q. If you look on the third line of that document,
4 which is in the actual category? And I take it that
5 these are --- the numbers reflected in those first three
6 lines are actual numbers that you've experienced and
7 everything following that is forecast; is that correct?

8 A. I believe the --- possibly the --- well, the
9 2016-'17 winter peak is a forecasted number.

10 Q. That's what I wanted to know.

11 A. Okay.

12 Q. Other than that, the rest of the year 2016 is
13 actual numbers?

14 A. Yes.

15 Q. But the winter peak demand is forecast?

16 A. Yes.

17 Q. Is that taken from the prior year's forecast?

18 A. No. Prior year's forecast? No.

19 ATTORNEY RODECKER:

20 I have no further questions.

21 CHAIRMAN:

22 Mr. Auville?

23 ATTORNEY AUVILLE:

24 No questions, Your Honor. Thank you.

25 ATTORNEY BECHER:

1 Thank you, Your Honor.

2 CROSS EXAMINATION

3 BY ATTORNEY BECHER:

4 Q. Mr. Eberts, were you present for June 22nd, I
5 think we called it a load forecast, an economic forecast
6 meeting, here at the Commission offices this past summer?

7 A. I'm not sure that was the name, but yes.

8 Q. Do you recall ---

9 A. Yes.

10 Q. --- being here for a conference where we
11 discussed load ---

12 A. Yes.

13 Q. --- forecasts?

14 A. Yes.

15 Q. And do you recall a handout that MonPower had
16 prepared for that meeting?

17 A. Yes.

18 Q. I want to hand you a document that is one of the
19 graphs from that handout. And I will note that I took
20 notes at that meeting, unfortunately, on this graph and
21 I've redacted my notes.

22 ATTORNEY BECHER:

23 And if we could mark this, Your Honor,
24 I believe we're up to Sierra Cross-5?

25 (Sierra Club Exhibit Cross-5 marked for

1 identification.)

2 BY ATTORNEY BECHER:

3 Q. Mr. Eberts, are you familiar with this graph?

4 A. Yes, other than the markings. Yes.

5 Q. Sure. And those markings are blacked out?

6 A. Yes.

7 Q. Okay. In this forecast, where this shows the
8 forecast of energy requirements within MonPower's zone,
9 MonPower Potomac Edison's zone?

10 A. Yes, the company zones, Potomac Edison and
11 MonPower; correct.

12 Q. And unfortunately, again, some of my redactions
13 covered up the labeling of the access to the left. I
14 believe that would be the Y axis. That's millions of
15 megawatt hours; is that correct?

16 A. Yes.

17 Q. All right. And you had responded to one of
18 CAG-SUN's questions that the energy requirements are one
19 of the main drivers of your load forecast; correct?

20 A. Yes.

21 Q. And the load forecast, in turn, is what goes
22 into projection for your capacity needs?

23 A. Yes, for my peak load forecast.

24 Q. This divides up the energy requirements by
25 sector; correct?

1 A. There's other sectors, but yes, by class and
2 then it breaks the industrial into other and shale.

3 Q. Would you agree with me that the vast majority
4 of the energy requirement growth here is due to the
5 development of shale gas in the industrial sector?

6 A. I would agree with that and there is some growth
7 in the eastern panhandle of Potomac Edison.

8 Q. Sure. But in comparison to the industrial shale
9 gas, it's relatively low?

10 A. That's correct.

11 Q. And so your energy requirement forecast is
12 dependent in large part on the actual development of the
13 shale gas sector?

14 A. That's correct.

15 Q. And for one reason or another, this particular
16 industry were not to develop your load forecast would not
17 --- or your energy requirement forecast would not be
18 nearly as high?

19 A. Assuming that nothing else takes its place or
20 assuming ---.

21 Q. I'm just talking about what is forecast here.

22 A. Yes.

23 ATTORNEY BECHER:

24 No further questions.

25 CHAIRMAN:

1 Any Redirect?

2 ATTORNEY KNIPE:

3 May I have a minute, Your Honor? I'll
4 keep it brief. Thank you, Your Honor.

5 ATTORNEY BECHER:

6 If I may, before we move on, I
7 neglected to previously ask to admit Sierra Cross Exhibit
8 5?

9 CHAIRMAN:

10 It will be admitted without objection.

11 CROSS EXAMINATION

12 BY ATTORNEY KNIPE:

13 Q. Mr. Eberts, in CAG's Cross Examination, you were
14 asked about how PJM can become aware of load shifts among
15 large customers. Do you recall?

16 A. Yes.

17 Q. While a utility can tell PJM about a load shift,
18 is PJM obligated to include the load shift in its own
19 forecast?

20 A. They are not obligated. We can provide the
21 information, and they choose whether or not it impacts
22 the entire zone or not. They don't always include the
23 final say in whether or not they include it.

24 Q. In your experience, have you made PJM aware of
25 load shifts that were ultimately not included in PJM's

1 forecast for the APS zone?

2 A. We have made recommendations and provided them
3 information, and they have denied those --- or not denied
4 them but they've come back with at least a reduced amount
5 that we don't even know what they've included and not
6 included. But it's a lower amount than what we've
7 provided them.

8 ATTORNEY KNIPE:

9 Thank you, Mr. Eberts. No further
10 questions, Your Honor.

11 CHAIRMAN:

12 All right. Top of page two of 12 of
13 your rebuttal testimony, you respond to a question about
14 the differences between your forecast and other forecasts
15 and whether or not they make your forecast controversial.
16 And you say, no, to the contrary, my forecasted load
17 growth is consistent with historical rates. And I take
18 it that you're saying that --- then you look at the
19 numbers below and that those rates are consistent, the
20 ones that you're shown there are consistent, the
21 historical with your forecast?

22 A. To the extent that it's growing, it ranges from
23 .9 to 2.7 and there's 1.8 ---.

24 CHAIRMAN:

25 That's fairly significant, isn't it?

1 A. Yeah, and the average is 1.8. So I'm saying, I
2 guess, I'm within the range of the historic growth.

3 CHAIRMAN:

4 So you're saying that --- that's why
5 you're saying it's consistent then?

6 A. And it's --- yes, that it's noncontroversial.

7 CHAIRMAN:

8 Okay. As is everything in this
9 proceeding. Thank you, Mr. Eberts.

10 A. All right. Thank you.

11 CHAIRMAN:

12 You're excused.

13 A. Thank you.

14 CHAIRMAN:

15 It's 3:27. I keep taking breaks, but
16 every couple three or four hours I think it's
17 appropriate. We will take a break until quarter of 4:00.
18 And at that time, we'll come back and we will, I guess,
19 be with Kurt Leutheuser; is that correct?

20 SHORT BREAK TAKEN

21 CHAIRMAN:

22 We're debating whether to throw all
23 your exhibits out, or just one or two of them. Now, we
24 have a discrepancy. I --- I think all your exhibits are
25 in except for the --- we had a --- not a dispute, but the

1 Kentucky application that was ---

2 ATTORNEY BECHER:

3 Yes, Your Honor.

4 CHAIRMAN:

5 --- six or seven years old and we
6 didn't know whether it was --- so we didn't let that in.

7 ATTORNEY BECHER:

8 Right.

9 CHAIRMAN:

10 We said you could cite to it.

11 ATTORNEY BECHER:

12 Yeah.

13 CHAIRMAN:

14 I think all the other exhibits are in.

15 ATTORNEY BECHER:

16 That was my impression, Your Honor.

17 CHAIRMAN:

18 All right.

19 If --- if they weren't, they are.

20 ATTORNEY BECHER:

21 Thank you.

22 CHAIRMAN:

23 All right.

24 And I understand that consistent with
25 our admonition and absolute bar against moving people

1 around, we've got another suggestion.

2 ATTORNEY WILLIAMSON:

3 Mr. Chairman, yeah, that's ---.

4 CHAIRMAN:

5 Is this the --- is this ---?

6 ATTORNEY WILLIAMSON:

7 I'll take ---.

8 CHAIRMAN:

9 Is this the ---

10 ATTORNEY WILLIAMSON:

11 I'll take responsibility for that one.

12 CHAIRMAN:

13 --- 3:25 flight to Dallas or something
14 --- every hearing ---.

15 ATTORNEY WILLIAMSON:

16 Unfortunately, it's a drive to New
17 Jersey for Mr. Messer.

18 CHAIRMAN:

19 All right. All right.

20 ATTORNEY WILLIAMSON:

21 So I'll take responsibility for that
22 and we certainly appreciate the --- the Commission's
23 indulgence and very much appreciate Mr. Jack and the
24 company's indulgence in allowing us ---

25 CHAIRMAN:

1 Call your witness.

2 ATTORNEY WILLIAMSON:

3 --- to call him.

4 Mr. --- Mr. Naum will be presenting the
5 witness.

6 ATTORNEY NAUM:

7 WVEUG called Mike Messer.

8 -----

9 MICHAEL MESSER, HAVING FIRST BEEN DULY SWORN, TESTIFIED
10 AS FOLLOWS:

11 -----

12 DIRECT EXAMINATION

13 BY ATTORNEY NAUM:

14 Q. Mr. Messer, could you make sure that the blue
15 light on the microphone is on?

16 A. Yes, it is.

17 Q. Great. Thank you.

18 Could you please state your name and business
19 address for the record?

20 A. Yes. My name, Michael K. Messer. And my
21 business address is 1 Greenwich Street, Stewartsville,
22 New Jersey.

23 And before the next question, I'd also like to
24 extend my thank you for accommodating my schedule. I
25 appreciate it.

1 CHAIRMAN:

2 No problem.

3 BY ATTORNEY NAUM:

4 Q. Mr. Messer, by whom are you employed?

5 A. Linde, LLC.

6 Q. And on whose behalf are you appearing in this
7 proceeding?

8 A. So today, I'm appearing on behalf of Linde, LLC
9 who is an atmospheric gasses manufacturer, as well as the
10 West Virginia Energy Users Group of which Linde is a
11 member and I am currently Chairman.

12 Q. Are you appearing as an expert witness in this
13 proceeding?

14 A. I am --- I am not a rates or a rates design
15 expert. I'm here today to provide the perspective of a
16 large energy intensive consumer and what the impact to
17 the cost, operational and risk impact is associated with
18 the Pleasant's acquisition.

19 Q. Thank you.

20 ATTORNEY NAUM:

21 I've provided the court reporter a copy
22 of a document marked as WVEUG Exhibit MKM-D. Your Honor,
23 I'd ask to have that identified for the record.

24 CHAIRMAN:

25 All right.

1 (WVEUG Exhibit MKM-D marked for
2 identification.)

3 BY ATTORNEY NAUM:

4 Q. Now, Mr. Messer, is WVEUG Exhibit MKM-D the
5 testimony that you prepared for this proceeding?

6 A. Yes, it is.

7 Q. Do you have any corrections to make?

8 A. No, I do not.

9 Q. If I were to ask you the --- the same questions
10 that are contained in this exhibit, would your answers be
11 the same?

12 A. Yes, they would.

13 Q. Is the information contained --- contained in
14 --- in WVEUG Exhibit MKM-D accurate and correct to the
15 best of your knowledge and belief?

16 A. Yes, it is.

17 ATTORNEY NAUM:

18 All right. Your Honor, I would ask to
19 have WVEUG Exhibit MKM-D admitted to the record, subject
20 to Cross Examination.

21 CHAIRMAN:

22 It will be admitted, subject to Cross
23 Examination.

24 ATTORNEY NAUM:

25 And Mr. Messer is available.

1 CHAIRMAN:

2 All right. CAD?

3 ATTORNEY ROBERTS:

4 No questions, Your Honor.

5 CHAIRMAN:

6 All right.

7 ATTORNEY SOULES:

8 No questions, Your Honor.

9 ATTORNEY AUVILLE:

10 No questions, Your Honor.

11 ATTORNEY BECHER:

12 No questions.

13 ATTORNEY CALLAS:

14 No questions.

15 ATTORNEY JACK:

16 A few questions.

17 CROSS EXAMINATION

18 BY ATTORNEY JACK:

19 Q. Good afternoon, Mr. Messer.

20 A. Good afternoon.

21 Q. The Pleasant's transaction, if approved, would
22 have an effect on Linde's rates?

23 A. Yes. As I understand it, if the acquisition was
24 approved as it was presented, it would have approximately
25 a four percent reduction in the cost. That reduction, as

1 I understand it, would be for just a one-year period.

2 So I know Linde and WVEUG's concern with that is
3 that the --- the cost that we see in West Virginia,
4 versus a market where we have access to the wholesale
5 market, say in Pennsylvania nearby, is roughly a 23
6 percent premium in West Virginia. So the four percent is
7 definitely a good step forward towards trying to make
8 West Virginia more competitive. But it is just that, a
9 first small step.

10 Q. Let's talk about that 23 percent difference.
11 And I --- I think that's over on page ten of your
12 testimony in figure one on that graph.

13 A. Yes, it is.

14 Q. Is that where it is?

15 A. Yes.

16 Q. You're comparing MonPower's Schedule K rate,
17 which, that's the rate that the Company gives to its very
18 large industrial customers?

19 A. Yes.

20 Q. And you compare that to the deregulated market?
21 I guess the first one there is a APS market and the
22 Duquesne Zone market ---

23 A. Right. And we ---.

24 Q. --- in Pennsylvania.

25 A. We did that comparison. For Linde, we have a

1 competing plant very close by in the Duquesne zone. We
2 also have a second facility in the APS zone, the
3 Pennsylvania portion of the APS zone. But that would
4 also be representative of the wholesale market in this
5 area, as well.

6 Q. Okay.

7 Now --- now the Schedule K rate that MonPower
8 offers, that's a retail rate, is it not?

9 A. Yes, it is.

10 Q. All right. And the comparisons here, these are
11 wholesale power rates?

12 A. Yes, they are.

13 Q. Okay. So your rates here, for instance,
14 wouldn't include distribution costs?

15 A. No, the --- the rates that we have here, for
16 example, the Duquesne zone, all the factors were added in
17 to try to make it as much as an apples to apples
18 comparison.

19 So for example, in the Duquesne zone with
20 Duquesne Light, there is a particular utility bill that
21 gets issued there and that utility bill does have charges
22 on it. For a customer --- a large customer, usually
23 those distribution charges are very minimal in a --- in a
24 utility bill, and the primary components of the bill
25 would be things like meter read costs, maybe some

1 surcharges if there's energy efficiency programs or
2 something on that order.

3 Q. Probably \$1.00 to \$2.00 a megawatt hour,
4 wouldn't you say?

5 A. It --- it varies dramatically from utility to
6 utility. On some that charge is, in Pennsylvania, like
7 \$1,000 a month. So it would be far less than that.

8 Q. Well, these prices for the APS wholesale market
9 and Duquesne, would they include surcharges from the
10 distribution utility?

11 A. I'm not sure what you're referring to, sir.

12 Q. Well, like environmental control charges,
13 say ---

14 A. Well, if you would ---.

15 Q. --- vegetation management charges?

16 A. It would be whatever charges that utility's
17 particular tariff would have in effect at the time.

18 Q. Okay. But those might be in this Schedule K
19 retail rate, but they're not in the wholesale rate?

20 ATTORNEY NAUM:

21 Could we just get clarification real
22 quick? Is Mr. Jack referring to the figure one ---

23 ATTORNEY JACK:

24 Uh-huh (yes).

25 ATTORNEY NAUM:

1 --- numbers? Okay.

2 ATTORNEY JACK:

3 That's correct.

4 A. I'm sorry. Could you repeat the question?

5 BY ATTORNEY JACK:

6 Q. Sure. Surcharges, such as environmental control
7 charges, vegetation management, for some people, not for
8 you, energy efficiency, but that would be part of
9 Schedule K costs but would not be in this comparison to
10 the wholesale market rates?

11 A. Well, the wholesale market, again, utility bill
12 charges would be added in. So for example, in
13 Pennsylvania, there's an Act 129 surcharge for their
14 energy efficiency program. So that would be a charge
15 that comes through on the utility bill.

16 Q. Right. But is that in this figure one?

17 A. Yes.

18 Q. Okay.

19 How about PURPA purchase obligations that
20 MonPower might have, is that something that you would
21 find in the Schedule K, but you wouldn't find in the
22 wholesale power price here?

23 A. That's a little bit out of my realm, but I
24 believe in the deregulated market that those charges
25 would not be applicable.

1 Q. Did you then pay for PURPA charges?

2 A. I'm not familiar with it, no.

3 Q. Okay. Very good.

4 Are you aware that there's a Grant 10 Petition
5 that WVEUG's involved in at this Commission?

6 A. Yes.

7 Q. Okay. Does MonPower have an obligation to stand
8 behind to provide power to you under the Schedule K 365
9 days a year, 24 hours a day?

10 A. Yes.

11 Q. Okay. And is there a cost to that?

12 A. Well the cost would be --- would be the cost of
13 the tariff. For us, Linde, since we're such a large
14 user, we have our own wholly-owned subsidiary, Linde
15 Energy Services, or LES, it's referred to. So in that
16 case, when we go directly to the wholesale market, we
17 have --- we were supplying ourselves, effectively, in
18 that --- in that go around. So we have an obligation,
19 obviously, to serve ourselves.

20 Q. Okay. You're familiar, Mr. Messer, with the
21 ENEC process and the rates involved, especially being an
22 energy intensive customer as Linde is?

23 A. Yes.

24 Q. Are you aware that there's --- creating the
25 current rates, there's an under recovery balance, as of

1 the last case, of about \$120 million? So that the
2 Company, in order to recover that under recovery, had to
3 build a correction factor, as we referred to it, to be
4 able to recover that, an extra increment on top?

5 A. My understanding is that in the ENEC currently,
6 I believe MonPower's collecting a little bit faster than
7 they had anticipated.

8 Q. You're --- you're correct. They are on the
9 correction factor. But there's a pretty sizable chunk
10 that's in the Schedule K, would you agree, that's causing
11 that Schedule K rate to be higher than it normally would
12 in order to recover that \$120 million under recovery?

13 A. Yeah. Again, I'm not exactly a rate expert. So
14 I --- that's why I --- I started down that path of making
15 sure that this is from the perspective of us in a
16 competitive position, looking at what our other options
17 are. I know it's in there, but I do not know of any
18 particular return --- return time frame or amount that
19 will be coming back, that would adjust what the current
20 Schedule K rate is.

21 Q. Okay. Thank you.

22 ATTORNEY JACK:

23 Permission to approach the witness?

24 Thank you. Could I ask that this be marked Companies
25 Cross Exhibit Number 1, please?

1 CHAIRMAN:

2 It will be so marked.

3 (Companies Exhibit Cross-1 marked for
4 identification.)

5 BY ATTORNEY JACK:

6 Q. You ready?

7 A. Yes, I'm sorry.

8 Q. Mr. Messer, do you recognize what's been marked
9 as Companies Cross Exhibit Number 1?

10 A. Yes.

11 Q. Is that your work paper for the figure one?

12 A. This was a spreadsheet and it was for --- not
13 for figure one, it was for figure --- figure four.

14 ATTORNEY NAUM:

15 Before we proceed, we need to verify
16 that this document is not confidential. I believe it was
17 provided to the companies as part of a confidential
18 Response to Discovery. So in --- in the event that it is
19 confidential, I just want to make sure that these numbers
20 are not --- are not included in the record, specifically
21 as they relate to the Arroyo plant's annual consumption.

22 ATTORNEY JACK:

23 I won't refer to those.

24 ATTORNEY NAUM:

25 Thank you.

1 ATTORNEY JACK:

2 Okay ---.

3 CHAIRMAN:

4 Was it confidential in the filing you
5 made recently? Is that the one you're talking about?

6 ATTORNEY NAUM:

7 Yes, Your Honor. It was the
8 confidential filing made in Response to Discovery.

9 CHAIRMAN:

10 The one we mentioned we granted ---

11 ATTORNEY NAUM:

12 That's correct.

13 CHAIRMAN:

14 --- yesterday morning?

15 ATTORNEY NAUM:

16 Yes.

17 CHAIRMAN:

18 All right. So it is confidential.

19 ATTORNEY JACK:

20 The pricing, you don't consider that
21 confidential, do you?

22 ATTORNEY NAUM:

23 I'll defer to the witness on that.

24 ATTORNEY JACK:

25 Okay. Okay.

1 BY ATTORNEY JACK:

2 Q. I'd like to direct your attention to just the
3 left-hand column there, not the right related to
4 consumption, but just the left. And this is your work
5 paper; correct?

6 A. Yes.

7 Q. And you have the years listed there, and then
8 the first column's the PJM load-weighted price by year?

9 A. Yes.

10 Q. All right. And --- and I assume, Mr. Messer,
11 you --- you couldn't get the APS price so you just went
12 with the PJM?

13 A. This --- this actual --- this price was actually
14 from the Mark and Monitor Report ---

15 Q. Yeah.

16 A. --- and it doesn't even come into figure four.
17 What's shown on figure four does not have anything to do
18 with the PJM price.

19 Q. Well, does --- does your work paper here reflect
20 the PJM load-weighted price for those years, ---

21 A. Yes, it does.

22 Q. --- for 2002 through 2016?

23 A. Yes, it does.

24 Q. Okay. Very good. And if you look at the second
25 column over, under West Virginia cost, under dollars per

1 megawatt hour, does that reflect the Schedule K price ---

2 A. Yes.

3 Q. --- for Linde?

4 A. Yes, it does.

5 Q. Okay. So looking at this on a historical basis,
6 2002 through 2008, it would look like the market was
7 higher than Schedule K. Is that a correct interpretation
8 of this work paper?

9 A. In the period leading up to like, 2008, 2009,
10 when the oil prices were --- were --- were escalating
11 dramatically, PJM prices were following along with that
12 escalation.

13 Q. Did you say PJM prices were following --- I'm
14 talking up to 2008 is all the farther I've got. In 2008,
15 the market price was \$71.

16 A. Right. When the --- when the oil --- leading up
17 to what had eventually became the recession, yes.

18 Q. I'm --- I'm with you. Okay. And so Schedule K,
19 it --- it stayed pretty much even because if you recall,
20 there was no ENEC at that point in time; correct?

21 A. Yes. Schedule K, at that point in time,
22 definitely made West Virginia a competitive market,
23 versus other options.

24 Q. Yes.

25 It built up a large under recovery, correct, of

1 dollars, that we saw the effect of that in 2009 and 2010?

2 A. That was before my time when ---

3 Q. Okay.

4 A. --- dealing with those issues. And it's a ---
5 it's a rate topic that I'm not familiar with.

6 Q. Okay. But just looking at that, I understand
7 you don't understand the --- the facts. But looking ---
8 you see the wholesale price, as you indicate earlier,
9 started to drop precipitously in 2009 due to the
10 recession --- the financial crisis. But actually, the
11 Schedule K rates started to climb when the ENEC was put
12 in place.

13 A. That rate, the rate under Schedule K certainly
14 did start to climb in 2009.

15 Q. Okay. So 2010's Schedule K was about \$54. I'm
16 not looking at cents, just to make it easy, \$54. And so
17 now in 2007, we're about \$58 a megawatt hour?

18 A. Yeah. Again, this is information that's rather
19 sensitive to Linde, so I'm not comfortable talking about
20 exact prices, especially when it relates to Linde's
21 operations.

22 Q. Okay. Okay.

23 A. I mean, we could go under Schedule K and --- and
24 --- and calculate a theoretical number by putting in
25 whatever demand you want in a high high-load factor

1 customer, and you would come out to a --- you know, a
2 particular number that would, you know, probably be, you
3 know, in the low 60s range.

4 Q. Okay. Well, without focusing on those numbers,
5 then, the --- the increase between 2010 and 2017 is about
6 seven, seven and a half percent, roughly?

7 A. I didn't do the math, but it looks ---

8 Q. Okay.

9 A. --- roughly like that.

10 Q. That one percent per year? Does that sound ---?

11 A. I would say, roughly.

12 Q. That was --- I'm sorry.

13 A. Roughly, yes.

14 Q. Okay. Do you believe that there is a regulatory
15 lag in vertically integrated states like West Virginia,
16 between the market and what you would see here in West
17 Virginia with tariff rates?

18 A. Well, I mean, there --- there clearly is a
19 disjoint. I don't know if you call it a lag, but it's
20 clearly a disjoint between the current markets.

21 You know, where a large customer can get --- in
22 Pennsylvania, not far away --- directly into that market,
23 and where West Virginia is right now. And that's really
24 a --- a key concern for Linde, for us.

25 And --- and our size of our consumption, that's

1 about a \$5 million a year impact and --- and a cost that
2 doesn't exist at a competing facility very close by. So
3 you're forced to try to recover over \$5 million in that
4 time frame. And --- and that's the focus where we're at,
5 is we're making decisions.

6 Electricity is 60 percent of our manufacturing
7 costs, roughly, so it's highly critical. And when you
8 have that type of differential in the marketplace, it is
9 extremely difficult to try to mitigate that and overcome
10 it.

11 Q. I understand. Over on figure two, which is on
12 page 12 of your testimony, Mr. Messer, you show a graph.
13 And I'll interpret the graph to show that the market
14 prices of Schedule K were above the PJM wholesale market
15 price for 95, 96 percent of the time.

16 Is that --- is that correct ---

17 A. Yes.

18 Q. --- interpretation? Were you here this morning
19 when Bob Lee gave his testimony that generators really
20 make most of their money on very few hours when prices
21 really spike?

22 A. Yes, I recall that statement.

23 Q. And do you agree with his statement?

24 A. I would disagree with that statement if you look
25 back a few years. Because back a few years, this general

1 shape of the curve still was in effect, but it was
2 definitely shifted into higher pricing with the shale gas
3 play that's now in force in PJM, what we have is a --- a
4 seriously truncated curve.

5 So yes, there are still a few hours of elevated
6 pricing. But I would say that there's fewer of them and
7 they're occurring at a lower rate.

8 Q. Okay. The last figure I want to draw your
9 attention to, over on page 15, your figure three. And
10 impressive graph there that --- it starts in about
11 January of 2011 and prices roughly about --- assuming
12 this isn't confidential, is it? I don't think so. It's
13 \$55, it says power rate.

14 A. For what time frame are you looking at?

15 Q. I'm looking at the start of your graph, January
16 of 2011.

17 A. Correct.

18 Q. About \$55 --- it went down, as we saw, and then
19 caught back up. So it's about, as we said, about \$58 ---
20 \$58 now, and change.

21 And you --- you reflect the Pleasant's Coal
22 Plant acquisition, the four percent decrease for you in
23 there. And then you reflect a potential ENEC rate
24 reduction that would come January 1 of '19?

25 A. Correct.

1 Q. Okay. And is that that --- the removal of that
2 correction factor of --- for that \$120 million that we
3 talked about earlier?

4 A. Yes, and to the best of my understanding on what
5 a projection of that is --- based on what a projection of
6 that is.

7 Q. And --- and just because it's hard to see here.
8 What --- what did you project that reduction --- upcoming
9 reduction to be?

10 A. I don't have the --- I don't have the numbers in
11 front of me. Just by the scale of the graph, I would say
12 it's a little over \$2 a megawatt hour.

13 Q. \$2, so you're thinking four percent? It could
14 be a little more, but four ---?

15 A. I --- I would say ---

16 Q. Okay.

17 A. --- in that range.

18 Q. Another four percent. Okay. Many of the costs
19 MonPower has for you as a high energy go through ENEC;
20 correct?

21 A. Correct.

22 Q. All right. And the Company doesn't make any
23 profit on the ENEC? Those are pass through costs?

24 A. To the best of my understanding, yes.

25 Q. And the PJM expenses, are those a large part for

1 transmission and things such as that?

2 A. I'm not --- I'm --- I don't understand the
3 question. Could you please repeat it?

4 Q. The --- the ENEC would have PJM charges, say for
5 RTEP transmission projects, things such as that?

6 A. Those charges need to be in there somewhere.
7 Exactly how they're factored into the Schedule K rate, I
8 am not familiar with.

9 Q. Okay.

10 A. But whatever is being paid on the wholesale
11 side, in a deregulated state, we would be paying over
12 here in some fashion under a regulated tariff.

13 Q. Okay. Last set of questions. You --- you make
14 several recommendations to the Commissions in this case,
15 near the end. And I'd just like to walk through them
16 quickly with you.

17 First one is Linde, or high energy users, would
18 like a cost reduction of about \$8 to \$12 per megawatt
19 hour. Is that a correct characterization?

20 A. That is correct. That would put us on a
21 competitive position, roughly, with other options in ---
22 in regional deregulated markets, so that from the
23 perspective of when you're making a decision of where
24 does production occur, where might a new facility plant
25 expansion go, et cetera, that we would be able to have a

1 competitive position here at our Arroyo and Parkersburg
2 facilities, versus having to --- having to potentially
3 shift that to Pennsylvania, for example.

4 Q. So if that were to occur, those savings occur to
5 you, where would --- those cost for MonPower, who would
6 end up picking up those costs?

7 A. That's something that we would have to discuss
8 and something that, you know, we would have to work
9 through.

10 But I think the flip side of this is, if you
11 take a look at our consumption, our consumption is at 46
12 percent of where we used to be in the state. And there's
13 other companies that would fall into that category as
14 well. So there's also a cost of large manufacturers
15 pulling back in the market place and now, here's less of
16 a presence. There's less contribution to address those
17 costs.

18 Q. Okay. You guys serve steel mills a good bit
19 in ---?

20 A. The steel mills for any atmospheric gases
21 company is usually a key customer.

22 Q. Okay. Has MonPower have some special contracts
23 with Linde in the past, say the past five years?

24 A. I'm not sure how to answer that question.

25 ATTORNEY NAUM:

1 Mr. --- Mr. Messer, I think if you'll
2 indulge me ---?

3 CHAIRMAN:

4 The answer is yes, isn't it?

5 ATTORNEY WILLIAMSON:

6 The answer is yes. You've had
7 agreements. They weren't for full services requirements,
8 but you've had agreements that were presented to the
9 Commission for approval?

10 A. Yeah, and I guess they are in the public domain.
11 So yes, the answer is yes.

12 CHAIRMAN:

13 30(c) Filing?

14 A. I'm sorry, I couldn't hear you.

15 CHAIRMAN:

16 Okay. Never mind. 30(c) Filing.

17 BY ATTORNEY JACK:

18 Q. Okay. Second recommendation, your three, was to
19 impose rate controls such as freezes and caps on MonPower
20 for an extended period of time. Do you think that would
21 --- that might cause legal or regulatory hurdles to
22 freeze rates on a utility, despite their costs?

23 A. Yeah, I'm just --- I'm simply looking at this
24 from a --- perspective of a difference in competitive
25 markets. So we have a proposal on the table that talks

1 about what I think is roughly, a four percent reduction.
2 As I said before, that's a --- a good, small first step
3 to doing that.

4 If the proposal would be potentially modified to
5 provide rate reductions over an extended period of time,
6 or to do them in a series for the next few years,
7 whatever the case may be that takes all the things that
8 are going on and closes the gap between what's going on
9 in West Virginia, cost-wise, and what's going on in
10 nearby competitive markets where people have a choice to
11 --- to pick that supplier, by going that process of
12 putting those together, you could potentially get
13 something that gets you --- that's --- puts, really, a
14 level playing field, I guess, is what I'm trying to say.

15 Q. Okay. And your final recommendation, Mr.
16 Messer, was the opportunity to essentially shop for
17 generation that would be cost effective for Linde; is
18 that correct?

19 A. Yes. I mean again, Linde has a wholly-owned
20 subsidiary where we supply power to ourselves, so we are
21 set up and running. We do this all across the Northeast
22 Texas. We haven't wandered into California, yet.

23 But it's a system that's in place. It's
24 something we're able to do at really very minimal cost.
25 It doesn't require additional people. The systems are

1 already constructed and operating for us to do that. So
2 we have the expertise to step in and --- and take that at
3 the --- at the wholesale market, but that option is
4 currently not available.

5 Q. And I think you know, back in the early 2000s,
6 West Virginia did consider restructuring and --- and in
7 fact, many people in this room were involved in that.
8 But do you believe that that would present some ---
9 similar to your recommendation, number two, some legal
10 and regulatory hurdles to be able to shop when you want
11 --- who you want, but also have MonPower stand by to
12 supply you when you want?

13 A. No, this was not a --- in that particular
14 option, there would be no requirement for MonPower to
15 actually provide anything for us. Linde is down the path
16 far enough that we can sustain it. Nobody's --- nobody
17 does that in other deregulated states, so we're able to
18 take that activity on on our own. So --- and also in
19 terms of what's required, for example, for the Pleasants'
20 acquisition, that obligation now becomes Linde Energy
21 Services.

22 So it effectively would shift away. You can
23 shift it away from MonPower and it would not be an
24 obligation that MonPower would have to --- have to
25 undertake if you followed the model that's existing in

1 nearby states.

2 Q. Well, those states have default service; do they
3 not? So the customer has the right to go back to the
4 utility?

5 A. The customer has the right to go back to the
6 utility and, again, that's not something that Linde would
7 do. And, again, I think that happens when you get to
8 more of the smaller type commercial businesses or maybe
9 residential businesses as well, but this isn't a solution
10 I think that's appropriate for all rate classes.

11 I mean, the large guys --- you know, when the
12 polar vortex came there were people screaming bloody
13 murder that they got these rates as they didn't go in and
14 --- and manage their risks. They didn't have hedge
15 contracts in place, et cetera. So it's not an option for
16 everyone. It's really for those more sophisticated type
17 customers that are willing to take that risk on.

18 ATTORNEY JACK:

19 Okay. Thank you very much, Mr. Messer.
20 Appreciate it.

21 A. Thank you.

22 ATTORNEY NAUM:

23 Your Honor, could I have a couple of
24 Redirect?

25 CHAIRMAN:

1 Yeah.

2 ATTORNEY NAUM:

3 Okay. Thank you.

4 REDIRECT EXAMINATION

5 BY ATTORNEY NAUM:

6 Q. Mr. Messer, Mr. Jack asked you some questions
7 related to the Companies Cross Exhibit 1. Do you have
8 that in front of you?

9 A. Figure one?

10 Q. Cross Exhibit 1, Companies Cross Exhibit 1,
11 which is your work paper.

12 A. Oh, I'm sorry. Yes.

13 Q. If you look at the West Virginia costs in 2002
14 and compare it with the West Virginia costs in 2018 does
15 the increase represent about an 88 percent change?

16 A. Yes, it does.

17 Q. And if you were to look at the 2016 PJM load
18 weighted price and compare it with the 2018 West Virginia
19 costs is that doubled?

20 A. Yes. Yes, it is.

21 Q. Thank you. Last question. Mr. Jack asked you
22 some questions about the proposed rate decrease in this
23 proceeding, if the transaction's approved and you said
24 that it would be a --- a good step forward. Now, Mr.
25 Messer, is a one-year rate decrease enough to justify

1 this transaction in your opinion?

2 A. No, it isn't. That's why I said it was a small
3 step in the right direction. So if we have what
4 effectively is a --- a 23 percent cost difference between
5 West Virginia and Pennsylvania that's what we need to
6 overcome. And if you take a look at PJM forwards I know
7 there's a statement earlier.

8 We go out and buy power up to five years out
9 into the future because there's markets where that trades
10 and prices have fallen off. So that's how we manage our
11 risk and we don't get caught in a particular market all
12 in. So you can go out very comfortably for five years
13 and buy power for that year that's out in the future,
14 2021, 2022. We do that now and by doing that we know
15 what the prices are and the prices are actually fairly
16 level, if not backward dated.

17 And what I mean backward dated is they're
18 actually a little bit lower than what they are today. So
19 you see a slight bump up next year and then it kind of
20 trails back off again. So in that scenario you know that
21 as a minimum for the next five year period prices are
22 flat to declining.

23 So anything that's being done for a year will
24 not be sufficient versus what we know will happen in the
25 Pennsylvania, for example, deregulated market because

1 people are out there buying power now and locking it in
2 for that time window. And that's exactly what we will
3 --- exactly what we have done.

4 So there's the time frame, which is one thing.
5 One year is not sufficient and I would argue that if you
6 want to make it West Virginia comparable to that market
7 you need to go five, ten years out because the market's
8 not going to take a jump all of a sudden in year six.
9 And we can get prices out there as well. So you need
10 something that's far longer. And the four percent
11 number, as I said, was a small good first step, but
12 really your 4 percent versus a 23 percent delta.

13 So you need to continue marching on and find a
14 way to change to be able to get that. Now, the ENEC
15 piece may be a part of that as that comes along to take
16 part of that difference away, but even if it comes along
17 at another 4 percent you're still at 8 percent versus a
18 23 percent difference.

19 And it's still very substantial. Better than
20 what it was, but still very hard to mitigate a
21 multimillion dollar impact in a year that you have to
22 overcome just to get back to ground zero.

23 Q. And do you have any confidence that that one
24 year rate decrease from the Pleasants' transaction would
25 be replicated going forward?

1 A. I have seen nothing that says that it goes
2 beyond one year.

3 ATTORNEY NAUM:

4 Okay. Thank you. That's all I have.

5 CHAIRMAN:

6 Mr. Messer, I'm --- I'm troubled by
7 your testimony. Not --- not because we're not
8 sympathetic to the --- the industrials and the industrial
9 load and the problems you suffer, but --- but there was a
10 period of time --- I've --- I've tracked the --- the cost
11 rates for at least four appearances before the
12 Legislature. And over a period of time we've been
13 extremely competitive with --- with surrounding states in
14 both --- at least in the cost of production and sales to
15 industrial, residential and --- and --- and commercial.

16 And I'm not sure what your charts show
17 me. I mean, I know that there's been an increase and I
18 know your --- your attorneys have been aggressive in
19 attempting to --- to get a --- hold down rates as much as
20 possible for the industrial class. But what --- and
21 there was talk about deregulation.

22 Wasn't there a --- did you have
23 operations in states that got deregulated and --- and did
24 you experience great decreases or were there, in fact,
25 fly-ups after they went to deregulation?

1 A. We're --- we're talking about a time period when
2 --- when two dramatically different things have
3 happened ---

4 CHAIRMAN:

5 Uh-huh (yes).

6 A. --- in my opinion. When we deregulated in
7 Pennsylvania back in '99, 2000 you had this run up that
8 we --- that we were showing before in the PJM prices,
9 so ---.

10 CHAIRMAN:

11 And in other states, too?

12 A. And in other states, yeah, too. So that
13 happened, but now we have from that time period when we
14 were having all sorts of oil price run-ups, et cetera,
15 that scenario has now gone away, has been replaced by
16 shale gas and the shale gas revolution.

17 And the introduction of a lot of new gas-fired
18 generation into the PJM market that has --- has helped
19 from a cost perspective and an operational flexibility
20 perspective to really push down prices. So --- but the
21 shale gas, I don't think that it's the same. It's not an
22 apples to apples comparison because the markets are so
23 dramatically different now from where they were when some
24 of the other states deregulated. I --- I go back to
25 that.

1 We can --- we can and we have bought power years
2 into the future, so we're --- we're locked in at --- for
3 some consumption, you know, as part of our risk
4 management program. And we have those prices and we know
5 what they are, and they're reflective of a market that's
6 really right now pretty stable.

7 CHAIRMAN:

8 Okay. Thank you, sir.

9 A. Thank you.

10 CHAIRMAN:

11 The Company Cross-1 --- Company
12 Confidential Cross-1 will be admitted and you're excused,
13 sir.

14 A. Thank you again for accommodating my schedule.

15 CHAIRMAN:

16 All right.

17 ATTORNEY PRESLEY:

18 The Companies would like to call Kurt
19 Leutheuser to the stand.

20 CHAIRMAN:

21 Who are you calling?

22 ATTORNEY PRESLEY:

23 Kurt Leutheuser.

24 CHAIRMAN:

25 One more time.

1 ATTORNEY PRESLEY:

2 Leutheuser. It took us a while to
3 figure it out, too, so ---.

4 -----
5 KURT LEUTHEUSER, HAVING FIRST BEEN DULY SWORN, TESTIFIED
6 AS FOLLOWS:
7 -----

8 CHAIRMAN:

9 Would you pronounce your name for me,
10 please?

11 A. Sure. It's a German name.

12 CHAIRMAN:

13 We figured that much out.

14 A. Change EU to an OI sound, Leutheuser.

15 CHAIRMAN:

16 Leutheuser. Okay.

17 A. And I'm comfortable with being called Kurt as
18 well.

19 CHAIRMAN:

20 And I suspect you've been called a
21 number of other things, various --- various versions on
22 the theme. All right. Go ahead.

23 ATTORNEY PRESLEY:

24 Okay.

25 DIRECT EXAMINATION

1 BY ATTORNEY PRESLEY:

2 Q. Mr. Leutheuser, you already stated your name, so
3 can you please state your business address?

4 A. My business address is 3550 Green Court, Ann
5 Arbor, Michigan, Black and Veatch.

6 Q. Okay. And how are you employed at Black and
7 Veatch?

8 A. I'm a project manager.

9 Q. And how long have you been with Black and
10 Veatch?

11 A. Just over 20 years.

12 Q. Okay. And can you describe your
13 responsibilities there?

14 A. Yes. I'm responsible for obtaining work and
15 executing projects.

16 Q. Okay. And did you prepare Direct and Rebuttal
17 testimony as part of this proceeding?

18 A. Yes, I did.

19 Q. Do you see it there in front of you on the
20 stand?

21 A. Yes, I do.

22 Q. Okay. Do you have any --- any corrections that
23 you'd like to make at this time?

24 A. No, I do not.

25 ATTORNEY PRESLEY:

1 Okay. We'd like to move for admission
2 of those two pieces of testimony to be marked as KPL-D
3 and KPL-R.

4 (Companies Exhibit KPL-D marked for
5 identification.)

6 (Companies Exhibit KPL-R marked for
7 identification.)

8 CHAIRMAN:

9 All right. They'll be so marked.

10 ATTORNEY PRESLEY:

11 And with that we'd like to offer Mr.
12 Leutheuser up for Cross Examination.

13 CROSS EXAMINATION

14 BY ATTORNEY ROBERTS:

15 Q. Good afternoon, Mr. Leutheuser. Your ---

16 A. Good afternoon.

17 Q. --- work in this transaction you evaluated the
18 Pleasants' plant; is that correct?

19 A. That is correct. We did a technical evaluation.

20 Q. Did you include the McElroy Run in your
21 evaluation?

22 A. It was part of the facility. It was not a
23 matter of focus though.

24 Q. Were you aware it's a high hazard facility?

25 A. I was not.

1 Q. Are you aware that it will be closing during the
2 forecast period of 15 years?

3 A. There is a report calls out that duration being
4 less than 15 years.

5 Q. And so you assigned no monetary or closing
6 impact of that facility in your report?

7 A. Our report addresses that by showing the amount
8 of money that's been allocated near the cap expenditure
9 for ash ponds.

10 Q. And what is that amount of money?

11 A. \$45 million.

12 Q. And who provided that amount of money?

13 A. The --- the seller did.

14 Q. And did you do any independent verification of
15 whether that was a reasonable amount?

16 A. We checked that amount and we found it to be
17 reasonable.

18 Q. And what did you do to check that amount?

19 A. We did it at a high level. We recognized that
20 if a figure of \$4 or \$5 million was provided, that would
21 be obviously too low and if a figure of \$100 million was
22 provided that would probably be too high.

23 Q. Are you aware of the --- the breaches of the
24 Tennessee Valley in Duke ponds?

25 A. I have heard of those, yes.

1 Q. Are you aware that the damages resulting from
2 those exceeded a billion dollars each?

3 A. I am not.

4 Q. So would that influence your opinion as to
5 whether you're accepting the seller's representation as
6 to the hazard presented by McElroy or the closing costs
7 would be reasonable?

8 A. I stand by the report as it's written.

9 ATTORNEY ROBERTS:

10 Thank you. No other questions.

11 CROSS EXAMINATION

12 BY ATTORNEY LOCKE:

13 Q. Good afternoon, Mr. Leutheuser.

14 A. Good afternoon.

15 Q. My name is Benjamin Locke. I represent West
16 Virginia Citizen Action Group and West Virginia SUN.

17 A. Pleased to meet you.

18 Q. Thank you. In its technical analysis Black and
19 Veatch considered equivalent demand forced outage rates;
20 correct?

21 A. That is correct.

22 Q. As a matter of general principle if you increase
23 non-environmental capital ---?

24 CHAIRMAN:

25 Can you pull your microphone up,

1 please?

2 ATTORNEY LOCKE:

3 Oh, sure. Thank you.

4 CHAIRMAN:

5 Make sure it's on and I'll do the same.

6 ATTORNEY LOCKE:

7 Okay. Thank you. I think it's on.

8 Okay.

9 BY ATTORNEY LOCKE:

10 Q. As a matter of general principle, if you
11 increase non-environmental capital expenditures, then you
12 should expect to see a decrease in demand equivalent
13 forced outage rates; is that correct?

14 A. I'm not prepared to answer that question.

15 Q. Well, would you agree that there's a
16 relationship between capital expenditures and --- and
17 demand equivalent forced outage rates?

18 A. I don't believe I can make that correlation. We
19 have covered the --- we've covered the capacity
20 characteristics you're talking about in section 3.1 of
21 our report.

22 Q. Yeah, I'm --- I'm --- so just to clarify, I'm
23 speaking as a matter of general principle.

24 A. And I'm not familiar with those principles.

25 Q. You are familiar with the --- the definition of

1 --- of demand equivalent forced outage rate; correct?

2 A. As it's written in the report.

3 Q. So --- so my understanding from the report is
4 that demand equivalent forced outage rate measures the
5 probability that a unit won't meet its demand due to
6 forced outages; correct?

7 A. I believe that's correct.

8 Q. But you're not prepared to say one way or
9 another whether there's a relationship between capital
10 expenditures and --- and forced outages as a matter of
11 general principle?

12 A. I just assume take a stand to say I don't know.

13 Q. Okay. Multiple --- more than once in your
14 Rebuttal testimony you --- you state that capital
15 expenditures will improve operation, quote, operation at
16 the plant. Is that a fair characterization of your ---
17 of your Rebuttal testimony?

18 A. Yes. Capital expenditures can be used to
19 improve performance and it can also be used to meet
20 regulations.

21 Q. But improve performance, there's --- there's no
22 relationship between improved performance and reduced
23 forced outages?

24 A. There could be.

25 Q. Okay. So it's possible as a matter of general

1 principle that capital expenditures then do have a
2 relationship with demand equivalent forced outage rate?

3 A. Following your line of reasoning, yes.

4 Q. Yeah. And --- and that would be an inverse
5 relationship; correct?

6 A. Yes, following your line of reasoning.

7 Q. Similarly as a matter of general principle if
8 you increase fixed O&M you should see a decrease --- a
9 decrease in equivalent forced outage rates --- pardon me,
10 demand equivalent forced outage rate; correct?

11 A. Possibly.

12 Q. When you say possibly is this the same possibly
13 that you were using before when you were talking about
14 relationship between cap backs and --- and demand
15 equivalent forced outage rates?

16 A. Yes.

17 Q. Okay. So there's possibly an inverse
18 relationship between fixed O&M expenditures and demand
19 equivalent forced outage rates?

20 A. I'm not sure I understand the question.

21 Q. Okay. I'm going to move on. In its technical
22 analysis Black and Veatch also considered availability;
23 correct?

24 A. Yes. Yes, we did.

25 Q. So, again, as a matter of general principle can

1 you agree that a decrease in --- in demand equivalent
2 forced outage rate would mean an increase in
3 availability?

4 A. Can you restate the question again?

5 Q. Sure. As a matter of general principle would a
6 decrease in demand equivalent forced outage rate mean an
7 increase in availability?

8 A. Yes, it would.

9 Q. In the course of its technical analysis Black
10 and Veatch reviewed expected recurring annual capital
11 expenditures for the years 2018 through 2022; is that
12 correct?

13 A. Yes, it is.

14 Q. Just to --- to be sure Black and Veatch does not
15 know what that --- what those expenditures will be
16 invested --- what projects that money will be spent on;
17 is that correct?

18 A. There are projects that are listed in the
19 report.

20 Q. Correct. Well, maybe I'll --- I'll refer you
21 to ---.

22 A. There's categories. There's categories of work
23 that's listed in the report.

24 Q. Okay. But Black and Veatch is not aware of
25 actual specific projects that that money will be spent

1 on; is that correct?

2 A. I don't know.

3 Q. In that review of capital expenditures Black and
4 Veatch didn't look at any years after 2022; right?

5 A. That's --- we were given information that took
6 us out to '22, '23.

7 Q. So are you saying that Black and Veatch reviewed
8 expected recurring annual cap backs for the year 2023?

9 A. That is correct. It's in section 3.10 of our
10 report.

11 Q. I'm looking at the table on page --- extending
12 from page 3.10 to 3.11. I'll refer you to that.

13 A. Yes.

14 Q. Are you ---?

15 A. That's --- that's where I am as well.

16 Q. Okay. I just --- I see expected recurring
17 annual cap backs listed in the fourth column of the table
18 and I see numbers corresponding to future years 2017
19 through 2022?

20 A. That's correct. At the top of the page and then
21 I got the 2023 and later down below for the CCR further
22 down on the page.

23 Q. Is that the same as expected recurring annual
24 cap backs?

25 A. No, it's not.

1 Q. Black and Veatch didn't review projected fixed
2 O&M amounts; correct?

3 A. Fixed O&M amounts. We did check O&M amounts
4 that were provided to us.

5 Q. Were those ---?

6 A. And we did that --- we did that on a gross
7 level.

8 Q. Those were future projected O&M amounts or
9 historical?

10 A. I believe it was --- I believe it was
11 historical.

12 Q. Okay. And so Black and Veatch doesn't know
13 exactly what projects that fixed --- future fixed O&M
14 money will be spent on; is that correct?

15 A. That is correct. We did not get into those
16 details.

17 Q. You mentioned just a moment ago that Black and
18 Veatch reviewed historical fixed O&M money. That was the
19 --- the ---? Sorry. Fixed O&M figures. Those were the
20 figures that were provided in AE Supply's response to the
21 RFP; is that correct?

22 A. I believe so.

23 Q. And Black and Veatch found --- pardon me, Black
24 and Veatch found that the O&M spending was --- was
25 reasonable; is that correct?

1 A. That's correct.

2 Q. But Black and Veatch doesn't know exactly what
3 projects that spending was used for; correct?

4 A. That's my understanding.

5 Q. Black and Veatch's conclusion that the O&M
6 spending was reasonable --- sorry, the historic fixed O&M
7 spending was reasonable, that conclusion was based on the
8 average O&M costs for other facilities similar to
9 Pleasants of the same type and age as Pleasants. Is ---
10 am I correct about that?

11 A. Yes.

12 Q. Okay. But the --- the report doesn't contain a
13 figure for average O&M costs for other similar facilities
14 of the same type and age as Pleasants; is that correct?

15 A. Let me check.

16 Q. Actually, sir, just to --- to ---.

17 A. I did not see those.

18 Q. Okay. And nor did the report --- or nor does
19 the report identify those other facilities of similar
20 type and age from which that average was derived;
21 correct?

22 A. Correct.

23 Q. Okay. I'd like to refer you in the report to
24 the top of page 3-8. Are you there?

25 A. Yes, I am.

1 Q. Thanks. I'm just going to briefly summarize
2 what --- how --- what I understand that to be saying and
3 --- and I'll invite you to --- to confirm my
4 understanding or --- or correct me. My understanding is
5 the report identifies a 2014 generator inspection report,
6 which recommends repairs to the unit one generator. Is
7 that --- is that accurate?

8 A. That is accurate.

9 Q. Okay. And the Black and Veatch report goes on
10 to state that there's no planned generator outage until
11 2020 or 2023 and it also goes on to state that waiting
12 that long may be, quote, too long to avoid serious damage
13 to the generator, closed quote. Is that correct?

14 A. That is correct.

15 Q. Okay. And Black and Veatch hasn't identified
16 any future capital expenditure budgeting as dedicated to
17 making those repairs earlier than 2020; correct?

18 A. That is correct. However, something you might
19 be interested to know is that the --- our role on this
20 job, what our task was with the --- for our client was to
21 do a high level technical evaluation and we would be
22 concentrating our efforts on looking at things that were
23 out of norm or, you know, not reasonably being handled,
24 things that might be some serious flaws or things that
25 might be of concern.

1 And so this is an area of concern that we ---
2 that we raised, so that the buyer would be aware of this
3 situation. And they can make a determination as to how
4 to handle it. What's interesting to know is that in May
5 of this year the plant had an opportunity to take a look
6 at another inspection of that generator.

7 And their inspection found that they needed to
8 perform service on it and they had that service done. So
9 this issue, even though it existed in February no longer
10 exists. It's been taken care of.

11 Q. Black and Veatch reviewed the UCAP figures that
12 are provided and supplies RFP response; is that correct?

13 A. Yes.

14 Q. But Black and Veatch did not evaluate projected
15 UCAP for any year past 2021 --- pardon me, 2020 to 2021;
16 is that correct?

17 A. I believe that's correct. Again, I'm looking at
18 section 3.1 of our report.

19 Q. A moment ago you responded to some CAD
20 questioning about McElroy's Run, the impoundment?

21 A. Yes.

22 Q. Yeah. I'm going to cut my questions short there
23 because some of them have already been covered, but I do
24 just want to clarify a couple of points. The figure that
25 was provided, the --- the \$44 --- pardon me, the \$45

1 million estimated closure cost, Black and Veatch doesn't
2 know how that number was calculated; is that correct?

3 A. That --- I don't believe we were given details
4 on that --- that calculation. That's correct.

5 Q. And Black and Veatch didn't perform a --- a site
6 inspection; correct, at McElroy's Run?

7 A. That's correct. That was not part of our scope.

8 Q. And now did Black and Veatch review any reports
9 from site inspections; is that correct?

10 A. I believe that's correct.

11 Q. Okay. Black and Veatch didn't ---?

12 A. If --- if there had been there's nothing
13 remarkable that was --- that made it to the report, but I
14 was not there on --- I was not one of the people that
15 went and did the site visit and interviewed the plant
16 operations people and so forth. And there's nothing
17 about McElroy's Run that --- that was considered
18 significant enough to make the report.

19 Q. Okay. And nor did Black and Veatch produce any
20 reports from site inspections when --- when requested to
21 --- to produce all materials referenced in the course of
22 this investigation?

23 A. I believe --- I believe that's correct.

24 Q. Black and Veatch didn't review any structural
25 stability analyses for McElroy's Run; is that correct?

1 A. I believe that's correct.

2 Q. And Black and Veatch hasn't evaluated the likely
3 costs of maintaining structural stability in the future
4 at McElroy's Run; correct?

5 A. It was not part of our scope.

6 Q. Okay. Relatedly Black and Veatch didn't
7 evaluate the potential for catastrophic failure of the
8 impoundment; correct?

9 A. It was not part of our scope.

10 Q. Okay. And Black and Veatch didn't review the
11 closure plant for McElroy's Run; is that correct?

12 A. It was not part of our scope.

13 Q. Okay. Similarly I'll take it then that Black
14 and Veatch didn't review the post closure plant for
15 McElroy's Run?

16 A. Correct. That was not part of our scope.

17 Q. Okay. Black and Veatch didn't consider whether
18 or not the impoundment was --- is lined; is that correct?

19 A. I don't know.

20 Q. Black and Veatch didn't consider whether or not
21 the coal ash contained within the impoundment is in
22 contact with groundwater; is that correct?

23 A. I don't know.

24 Q. And Black and Veatch didn't consider the
25 potential for coal ash contaminants to leave from the

1 impoundment into groundwater; is that correct?

2 A. I don't know.

3 Q. Just one --- one final question on this line.
4 Black and Veatch didn't consider whether or not the coal
5 ash contained within the impoundment is in contact with
6 any sources of flowing water other than groundwater; is
7 that correct?

8 A. It'd be consistent with the way we treat that
9 whole area and say I don't know.

10 Q. Okay. And Black and Veatch's technical analysis
11 didn't take into account the dry ash landfill at the
12 Pleasants' site; is that correct?

13 A. If it wasn't --- everything that we took care of
14 is included in our report.

15 Q. Okay. Then just to --- to wrap that up can you
16 confirm Black and Veatch didn't evaluate any of the
17 closure costs or maintenance costs associated with the
18 dry ash landfill; is that correct?

19 A. We just addressed the costs that were presented
20 in the proposal. Our role was to review the proposal for
21 --- for being a technical evaluation event.

22 Q. Okay. I'm --- I'm not aware of any reference to
23 the maintenance costs or closure costs for the dry ash
24 landfill in --- in the technical analysis. Am I right
25 about that?

1 A. I don't know.

2 ATTORNEY LOCKE:

3 Okay. I have no further questions.

4 Thank you.

5 ATTORNEY WILLIAMSON:

6 WVEUG has no questions.

7 CHAIRMAN:

8 Mr. Hanna?

9 ATTORNEY HANNA:

10 No questions.

11 CHAIRMAN:

12 Mr. Rodecker?

13 ATTORNEY RODECKER:

14 Thank you, Your Honor.

15 CROSS EXAMINATION

16 BY ATTORNEY RODECKER:

17 Q. Good afternoon, Mr. Leutheuser.

18 A. Good afternoon.

19 Q. I'd like to turn to page II immediately
20 following the table of contents of your report. And the
21 first sentence states that this report was prepared for
22 Monongahela Power Company client by Black and Veatch and
23 is largely based on information not within the control of
24 Black and Veatch.

25 Black and Veatch has not made an analysis

1 verified or rendered an independent judgment of the
2 validity of the information provided by others and
3 therefore Black and Veatch does not guarantee the
4 accuracy thereof. Is that standard language in all of
5 your reports?

6 A. Where appropriate. In this particular case our
7 scope did not require us to verify all the information
8 provided by the purchaser. It was to evaluate the
9 information on a technical basis.

10 Q. Would I be correct that what this also means is
11 that you in essence relied upon what you were told by the
12 people at the plant?

13 A. I believe that's correct.

14 Q. And that you prepared no independent analysis of
15 your own?

16 A. Not in a detailed fashion. It was not in our
17 scope.

18 Q. Turning to page --- turning to page 38 and I ---
19 I understood part of the response to counsel for CAG-SUN
20 with regard to the May --- the May 17th inspection. Was
21 that related to the --- the item in the minute one that
22 was referenced in his questioning?

23 A. I'm not sure I understand that.

24 Q. Well, let me ask you this way. You state that
25 the 2014 --- this is on the very top of the page.

1 A. Yes.

2 Q. The 2014 generator inspection report for unit
3 one does have a list of recommended repairs that the
4 report indicates are to be done during an outage in 2017.
5 Were those repairs done?

6 A. I don't have confirmation as to what exactly
7 those lists was, what the list contained and what was
8 performed, but I would assume that the list was reviewed
9 when they had the opportunity to and recognize they
10 needed to have some service done on it. But the list
11 would have been addressed at that time.

12 Q. Why didn't you make that assumption? Did you
13 ask for them to be provide you with information or you
14 just ---?

15 A. No. No, I didn't.

16 Q. So you don't know?

17 A. Correct. That's why I said I assumed.

18 Q. You went on the next paragraph you have the unit
19 two have an inspection 2016 and unit one exciter will be
20 sent to Seamans in 2017 for inspection and repair. Is
21 that the one that you --- you referenced in response to
22 counsel for CAG-SUN that, in fact, work had been done?

23 A. No, it's not.

24 Q. It's not. Do you know whether this was done?

25 A. No, I do not.

1 Q. All right. Under 362, large transformers you
2 mention that there was a major failure of unit one GSU
3 bushing failure in 2011. What was --- what was the
4 nature of that failure? What caused it?

5 A. The report says it was a bushing failure and I
6 don't have the technical details behind that beyond
7 what's written in the report.

8 Q. Is there anything more in the report beyond what
9 we just read?

10 A. We can read the --- you can read the --- it's a
11 whole paragraph. You read the first sentence of the
12 third paragraph.

13 Q. Correct. But that's the only --- that's the
14 only location of discussion of that incident is that
15 paragraph?

16 A. I --- I believe so.

17 Q. Thank you. On page two of your Rebuttal
18 testimony on line --- beginning on line 16 through line
19 20 --- actually, through line 19 you're responding to a
20 question of whether the Pleasants can operate reliably
21 for decades. And you mention --- your response states it
22 is possible through normal maintenance to operate longer
23 than that depending on the robustness of the original
24 design. Why did you make that caveat of original --- of
25 the robustness of the design?

1 A. I think you need to read the whole --- the whole
2 answer there and it's --- it would --- the --- in order
3 for a plant to be operated it needs to be effectively
4 maintained and operated, and it also needs to be a plant
5 that's been designed for --- for long life and --- and
6 this one is.

7 Q. So your --- your use of that term depending on
8 the robustness of the original design, had you made a
9 determination that --- that it wasn't robust design in
10 this instance?

11 A. I don't --- I don't think that's accurate.

12 ATTORNEY RODECKER:

13 I have no further questions.

14 CHAIRMAN:

15 Staff?

16 ATTORNEY AUVILLE:

17 No, no questions. Thank you.

18 CROSS EXAMINATION

19 BY ATTORNEY LEE:

20 Q. Good afternoon, Mr. Leutheuser.

21 A. Good afternoon.

22 Q. My name's Bridget Lee. I'm here representing
23 the Sierra Club and I'd like to ask you some questions
24 about the evaluation of the environmental aspects of the
25 Pleasants plant that was conducted in connection with

1 Black and Veatch's review of the AE Supply's proposal.

2 A. Okay.

3 Q. Can you --- with respect to the environmental
4 aspects can you explain your responsibilities in
5 preparing the Black and Veatch report?

6 A. I supervise the report being prepared. The
7 report was prepared by others.

8 Q. So did you have a team of folks who were focused
9 specifically on environmental issues?

10 A. We had a mechanical engineer, and an electrical
11 engineer and we also had another engineer that was
12 involved with cap backs, and budget and those type of
13 things. And the engineers that we had have been
14 experienced on air quality projects as well as general
15 coal-fired power plants.

16 Q. Anyone with experience on coal ash issues or
17 groundwater issues in general?

18 A. We did not have anyone that was --- specialized
19 as a focus in those areas.

20 Q. And who from that team conducted the site visit?

21 A. The mechanical engineer and the electrical
22 engineer.

23 Q. So is it fair to say that those two folks were
24 focusing their visit on the --- the operations of the
25 plant as opposed to the pollution control systems?

1 A. They had a wide range of areas that they covered
2 at a high level and they covered the information
3 regarding the effluent limit guidelines, the mercury and
4 air toxics, cross state air pollution rule and coal ash
5 regulations as described in Section 3.8 of our report.

6 ATTORNEY LEE:

7 Thank you. Your Honor, permission to
8 approach?

9 BY ATTORNEY LEE:

10 Q. Mr. Leutheuser, you've been handed an exhibit
11 that will be marked as Confidential Sierra Club Cross-6 I
12 believe.

13 (Sierra Club Exhibit Cross-6 marked for
14 identification.)

15 BY ATTORNEY LEE:

16 Q. This exhibit consists of five pages and it's
17 excerpted from a confidential document that was provided
18 to the parties in response to a discovery request. I
19 won't be referring to any confidential portions and if
20 we're getting near it, I'll let you know.

21 A. Okay.

22 Q. Do you recognize this document?

23 A. I do not.

24 Q. Can you read the --- the title page?

25 A. Allegheny Energy Supply Company, LLC response to

1 the MonPower Company request for proposals.

2 Q. Could you please turn to page four of your
3 Direct testimony?

4 A. Okay.

5 Q. And starting at line seven you state that Black
6 and Veatch reviewed the proposal section which provides
7 significant detail of the Pleasants facilities
8 environmental compliance plans. Did I read that
9 correctly?

10 A. Yes, you have. And it goes on to talk about the
11 section 3.8 report.

12 Q. And are the last three pages of the document
13 you've just been handed the section of the proposal to
14 which that testimony refers?

15 A. I'm not --- I've never seen this before, so I
16 didn't prepare these details.

17 Q. Did you ---?

18 A. I did not work with these details.

19 Q. So let me take a step back. Could you explain
20 the scope of work that Black and Veatch was tasked with
21 performing on behalf of MonPower?

22 A. Yes, we were tasked with preparing a high level
23 technical evaluation of the proposals and we were to look
24 for things that would be of serious flaws or major
25 concerns.

1 Q. And in preparing that high level technical
2 proposal did you read the proposals?

3 A. We were only given one proposal and ---.

4 Q. Which one?

5 A. We were given the one from --- from Pleasants.

6 Q. And is that not the proposal in front of you?

7 A. It appears to be.

8 Q. Okay. So when I asked you before if page four
9 of your Direct, line seven where you refer to Black and
10 Veatch's review of a proposal section detailing the
11 Pleasants environmental compliance plans, is that section
12 the document that's in front of you now?

13 A. It appears to be.

14 Q. Thank you. And I believe you testified, but
15 let's just --- just to clarify. Did you review any of
16 the facilities environmental compliance plans themselves?

17 A. I don't know. The work that we did was --- it's
18 --- it's contained in the report.

19 Q. Other than this report did you review any
20 documents relating to environmental compliance at the
21 Pleasants plant?

22 A. We reviewed the documents listed in the appendix
23 to our report and we also did a site visit and we also
24 interviewed plant operations and maintenance personnel.

25 Q. Sure. Let's go to that appendix. Could you ---

1 could you take a look at your report and direct me to the
2 appendix you just mentioned?

3 A. Sure. It's on page 4-1. It's titled 4.0
4 reference.

5 Q. Okay. It looks to be about two and a half pages
6 with 51 items listed?

7 A. That's correct.

8 Q. And maybe if you want to just take a minute or
9 two to review this to yourself and let me know if you see
10 any descriptions of documents that looks like a document
11 that would be regarding environmental compliance.

12 A. Okay. Have completed review. Nothing is
13 obvious to me.

14 Q. Okay. Thank you. If you could turn to page 3-9
15 of your report, please.

16 A. Yes.

17 Q. Okay. And section 3.8 in the middle of the page
18 do you see that?

19 A. Yeah, paragraph 3.8 on page 3.9, 3-9. Yes.

20 Q. Yes. Could you just --- there's two sentences
21 that start that paragraph. Could you just read those
22 aloud, please?

23 A. Black and Veatch reviewed the proposal section
24 which provides significant detail of Pleasants facilities
25 and environmental compliance plans. This includes a

1 discussion of compliance with respect to the --- I'm
2 going to use the abbreviations here, ELG, MATS, Casper,
3 environmental control equipment, annual emissions debt
4 rates, coal ash regulations and the CCR.

5 Q. And if you could, please turn your attention
6 back to what's been marked as confidential Sierra Club
7 Cross-6, the five-page document. The first two pages are
8 the cover page and the table of contents and then there's
9 three following pages; is that right?

10 A. Yes.

11 Q. So are those three pages the section that
12 provides significant detail of the Pleasants'
13 environmental compliance plans?

14 A. I don't know.

15 Q. Okay. Could you describe Black and Veatch's
16 review of the Pleasants plants annual emissions?

17 A. I'm not prepared to go into that level of
18 detail.

19 Q. Okay. If you could take a look at the fourth
20 page of Sierra Club Cross-6. Are you there?

21 A. Yes, I am.

22 Q. Thank you. And do you see at the bottom of the
23 page a subheading that reads annual emissions rates?

24 A. Yes, I do.

25 Q. Okay. And the first sentence there refers to a

1 2015 annual emissions report; is that right?

2 A. Yes.

3 Q. Okay. And I didn't see that report listed in
4 your appendix, so is it fair to assume you did not review
5 it?

6 A. I don't know.

7 Q. Okay. And without --- well, I --- well, I'm
8 pretty sure these --- these numbers are publicly
9 available. Let's --- let's not name the precise numbers,
10 but if you could turn to the following page where the
11 Pleasants emissions rates are presented and just take a
12 look at those, but don't read them into the record. Do
13 you see the --- the top row where nitrogen oxides rates
14 are listed?

15 A. I do.

16 Q. Okay. And is it your understanding that those
17 rates represent an annual average for 2015?

18 A. I'm not familiar with this report, but it ---
19 that's what it says in the --- the --- it says the data
20 below is from the 2015 emissions report.

21 Q. Okay. And is the Pleasants plant equipped with
22 selective catalytic reduction or SCR systems?

23 A. I don't know. I know it has SO3 installed about
24 ten years ago.

25 Q. Sorry. Can you repeat that?

1 A. It has an SO3 removal system that was installed
2 about ten years ago. That was part of the modernizing
3 process.

4 Q. Sure. If I could just --- well, actually let's
5 --- yeah, I'm sorry. Let's stay with Sierra Club
6 Cross-6. On the third page there do you see a subheading
7 that says mercury and air toxic standards?

8 A. Yes, I do.

9 Q. And do you see selective catalytic reduction
10 systems mentioned in that paragraph?

11 A. Yes, I do.

12 Q. Thank you.

13 ATTORNEY BECHER:

14 May I approach, Your Honor? Thank you.

15 CHAIRMAN:

16 Is this a confidential document?

17 ATTORNEY LEE:

18 No.

19 CHAIRMAN:

20 Huh?

21 ATTORNEY LEE:

22 It's not.

23 BY ATTORNEY LEE:

24 Q. Mr. Leutheuser, you've been handed an exhibit
25 that I'll ask to be marked as Sierra Club Cross-7,

1 please.

2 (Sierra Club Exhibit Cross-7 marked for
3 identification.)

4 BY ATTORNEY LEE:

5 Q. This is a publicly available document. It's 20
6 pages consisting of a 2-page cover letter from the
7 Maryland Department of the Environment to the USEPA dated
8 November 16, 2016. And behind the cover letter an
9 18-page petition filed by the State of Maryland with the
10 USEPA pursuant to Section 126 of the Clean Air Act
11 seeking abatement of nitrogen oxides emissions from 19
12 plants including Pleasants that interfere with Maryland's
13 maintenance of national --- of the national ozone
14 standard. Mr. Leutheuser, have you ever seen this
15 document before?

16 A. No, I have not.

17 Q. And do you know if anyone at Black and Veatch
18 was provided this document as part of your scope of work?

19 A. No, I do not.

20 Q. Okay. Could you please turn to the fourth page,
21 which would be page two of the petition?

22 A. Okay. I'm there.

23 Q. Thank you. Do you see table one, which lists
24 the number of electric generating units that Maryland has
25 claimed are, quote, clearly not running controls

1 effectively?

2 A. Yes, I do.

3 Q. And are the units at Pleasants included on that
4 list?

5 A. They are.

6 Q. Okay. Could you flip a little further ahead to
7 page eight of the petition, please?

8 A. Okay. I'm there. Table three?

9 Q. Great. Yes. Thank you. And this table
10 identifies past nitrogen oxides emissions rates as well
11 as target rates that Maryland has requested. Is that a
12 fair description just from your quick review?

13 A. Can you say that again?

14 Q. Is it ---?

15 A. I'm seeing proposed rates compared to 2015
16 rates, 2016 rates, best rates from a previous year,
17 but ---.

18 Q. Yeah, we can just --- if we just take a look at
19 the --- the column headings. The fourth one over is a
20 Maryland proposed rate and then the next one to the right
21 is a past rate and it looks like it's different years for
22 each unit. And then to the right of that 2015 ozone
23 season average rate and then a 2016 ozone season average
24 rate; is that right?

25 A. Yes.

1 Q. And do you see the Pleasants plant listed at the
2 bottom of that table?

3 A. I do.

4 Q. And looking at the best ozone season average
5 rate, is it a fair characterization that the Pleasants
6 rate is the lowest compared to all the others in that
7 column?

8 A. It appears so.

9 Q. And is that rate lower than the rates identified
10 in the two columns to the right?

11 A. Yes, it is.

12 Q. And would you --- would it be fair to say it's
13 significantly lower?

14 A. Yes, I would.

15 Q. Great. Thank you. And if you could --- let's
16 compare this table with the table which we won't mention
17 numbers from in Sierra Cross-6, if you please.

18 A. I'm sorry. I wasn't following you quite there.
19 I'm going back to the --- to your first exhibit?

20 Q. Yes, please. This one (indicating).

21 A. Okay.

22 Q. The last page.

23 A. Okay.

24 Q. Is the --- are those the rates listed there for
25 units one and two for nitrogen oxide emissions higher

1 than the rates listed in table three in the best ozone
2 season average rate column?

3 A. These are --- these are different rates, but I
4 --- you know, I can't process as to what they --- what
5 they mean because of the different titles and so forth
6 and so on.

7 Q. Sure. Okay. That's fair enough. Let's move
8 on. Could you please turn back to page two of the ---
9 the cover letter of that Maryland exhibit?

10 A. Sure.

11 Q. Thank you. And once you're there could you
12 please read aloud just the first sentence?

13 A. Therefore Maryland is asking EPA to require that
14 existing control technology at 36 EGUs be run in a manner
15 consistent with manufacturer specifications during the
16 ozone season.

17 Q. Thank you.

18 A. Uh-huh (yes).

19 Q. And do you know what costs would be associated
20 with running the plant's existing control technology in a
21 manner consistent with manufacturer's specifications?

22 A. No, I do not.

23 Q. Okay. So it's --- it's fair for me to
24 understand that Black and Veatch did not consider those
25 costs or try to calculate them?

1 A. The information that we covered in our report is
2 --- is contained in our report. If it's not in the
3 report, it was not addressed.

4 Q. Do you know if those costs have been quantified
5 by AE Supply?

6 A. I do not.

7 Q. Do you know if they've been quantified by
8 MonPower?

9 A. I do not.

10 Q. As a general principle do operating maintenance
11 cost increase in pollution control systems are operated
12 at their maximum efficiencies?

13 A. Possibly.

14 Q. Could we turn to your Rebuttal testimony,
15 please, page two?

16 A. Sure. I'm there.

17 Q. Great. And I'm on --- starting on line 11
18 you've stated that the plant has undergone a number of
19 upgrades. Do you see where I'm looking?

20 A. That's --- that's correct.

21 Q. Okay. Do you know whether the plant's SCR ---
22 do you know when the plant's SCR system was last
23 upgraded?

24 A. No, I do not.

25 Q. Okay. Let's switch gears slightly. As part of

1 this evaluation of the environmental aspects of the
2 Pleasants plant did you or anyone on the Black and Veatch
3 team review the plant's compliance with federal effluent
4 limitation guidelines or ELGs that were finalized in
5 2015?

6 A. In the work that we would have done with regard
7 to that would have been covered in our report.

8 Q. So is it fair, since I'm not seeing it in your
9 report, to assume that no one on your team reviewed any
10 engineering or design plans for new pollution treatment
11 systems or other retrofits related to compliance with ELG
12 rule?

13 A. That would have been outside the scope of our
14 work.

15 Q. Okay. As would a review of permitting or
16 construction schedule?

17 A. Correct.

18 Q. And did anyone on your team review the documents
19 that would support AE Supply's cost estimate for
20 compliance with that rule?

21 A. I'm sorry. One more time.

22 Q. Sure. So I believe --- let me just ---.

23 A. You don't have to restate it. I got distracted
24 looking at the time.

25 Q. Sure. No, sorry to keep you. I'll try to ---

1 A. It's okay.

2 Q. --- move it along. Just wanted to take a peek
3 at your report real quick. Yes, I'm looking at page ---
4 and you don't have to go there, but I'm looking at page
5 3-9 where the report mentions the \$80 to \$120 million
6 range for effluent limitation guideline compliance costs.

7 A. Okay.

8 Q. Did you or anyone on your team review any
9 documents that would support those cost estimates?

10 A. I don't believe so. Again, I think what we did
11 was a high level review to see if they ---

12 Q. Sure.

13 A. --- were --- they were --- what we were looking
14 for was to see if they had cap backs that was allocated
15 for known environmental concerns such as ELG or the CCR,
16 but the variability between plant sites and operating
17 characteristics can make that number vary quite a bit,
18 so ---.

19 Q. Understood. Thank you.

20 A. Uh-huh (yes).

21 Q. Could you please turn your attention back to
22 that Sierra Club Cross-6 Exhibit, the five-page
23 document ---

24 A. Sure.

25 Q. --- we've been looking at? And turn to the

1 third page, please. I'm sorry. The last page.

2 A. Okay.

3 Q. Could you read the first two sentences under
4 coal ash regulations?

5 A. Sure. Pleasants is in compliance with all coal
6 combustion residual regulations. Monitoring wells are
7 installed per CCR regulations and weekly inspections are
8 conducted and reported per the requirements.

9 Q. Thank you. Does the coal ash rule require
10 corrective action in the event that monitoring wells
11 detect groundwater contamination at certain levels?

12 A. I don't know, but it sounds reasonable.

13 Q. Okay. Do you know if anyone on your team would
14 be more familiar with the coal ash rule?

15 A. I do not.

16 Q. Okay. And were you present for Mr. Roberto's
17 testimony yesterday?

18 A. I was.

19 Q. Do you recall Mr. Roberto testifying about
20 liabilities associated with ownership of the McElroy's
21 Run impoundment?

22 A. Vaguely.

23 Q. Okay. Do you recall his characterization of the
24 risks associated with the storage of coal plant waste in
25 that impoundment as distinguishable from the risks

1 present at TVA's coal sites because, and I'm quoting him
2 here, just scrubber sludge, end quote, goes to McElroy's
3 Run?

4 A. I remember that.

5 Q. Okay. Do you know if coal ash has ever been
6 disposed of at McElroy's Run?

7 A. I do not.

8 ATTORNEY LEE:

9 Okay. Your Honor, permission to
10 approach?

11 CHAIRMAN:

12 You're not going to hit him or
13 anything; are you? Permission granted.

14 ATTORNEY LEE:

15 Thank you.

16 BY ATTORNEY LEE:

17 Q. Mr. Leutheuser, you've been handed an exhibit
18 that will be marked as Sierra Club Cross-8 I believe.

19 (Sierra Club Exhibit Cross-8 marked for
20 identification.)

21 CHAIRMAN:

22 Yes.

23 BY ATTORNEY LEE:

24 Q. And this is a 14-page document publicly
25 available pulled off EPA's archive website, which

1 consists of a 2-page cover letter from Allegheny Energy
2 to USEPA dated March 24, 2009 regarding McElroy's Run.
3 And a 2-page document that lists 10 EPA questions and
4 then 10 pages with answers to those questions that relate
5 to the --- the impoundment. Have you ever seen this
6 document, Mr. Leutheuser?

7 A. No, I have not.

8 Q. On the first page could you please just read
9 that first sentence under the ---?

10 ATTORNEY PRESLEY:

11 Objection. Mr. Leutheuser just said he
12 wasn't familiar with the document.

13 ATTORNEY LEE:

14 Okay.

15 BY ATTORNEY LEE:

16 Q. Could you please read the first sentence on the
17 first page? I can read it aloud then. That's fine.

18 Allegheny Energy Supply Company, LLC, AE Supply,
19 as part owner and operator of the Pleasants power station
20 represented by its agent, Allegheny Energy Services
21 Corporation is responding to your information request
22 letters relating to surface impoundments or similar diked
23 material or bermed management units or management units
24 designated as landfills which receive liquid borne
25 material from a surface impoundment used for the storage

1 or disposal of residuals or byproducts from the
2 combustion of coal including, but not limited to fly ash,
3 bottom ash, boiler slag or flue gas emission control
4 residuals.

5 We didn't need that read into the record through
6 there, but I thought it was useful to --- for you to ---.

7 CHAIRMAN:

8 You missed the morning rant.

9 ATTORNEY LEE:

10 I didn't want to miss my two o'clock
11 coffee.

12 BY ATTORNEY LEE:

13 Q. So I just wanted you to help understand what
14 this document is.

15 A. Thank you.

16 Q. Sure. Could you just turn to page six, please,
17 real quick and you'll see the heading because I don't
18 think it's numbered chronologically, but you'll see
19 response three underlined in bold.

20 A. I --- I see it.

21 Q. Great. And do you see a list of materials that
22 are disposed of in McElroy's Run impoundment?

23 A. I see a list of materials, but I don't see
24 anything about McElroy's Run on this. Maybe it talks
25 about that earlier in the --- in the report.

1 Q. So it says the --- does it says the materials
2 disposed of in the impoundment?

3 A. Yes.

4 Q. And on the bottom of the page does it name the
5 impoundment?

6 A. Oh, yeah, there --- yes, it does.

7 Q. Okay. So does that list include fly ash and
8 bottom ash?

9 A. Yes, it does.

10 Q. Okay. Thanks. Do you know if McElroy's Run
11 impoundment is unlined?

12 A. I don't know.

13 ATTORNEY LEE:

14 Your Honor, permission to approach for
15 the last time?

16 CHAIRMAN:

17 Permission granted.

18 ATTORNEY LEE:

19 Thank you.

20 A. Thanks.

21 BY ATTORNEY LEE:

22 Q. Mr. Leutheuser, you've been handed an exhibit
23 that I'll ask to be marked as Sierra Club Cross-9,
24 please.

25 (Sierra Club Exhibit Cross-9 marked for

1 identification.)

2 BY ATTORNEY LEE:

3 Q. Can you tell me what this document is by looking
4 at the first page?

5 A. It says McElroy's Run impoundment liner design
6 criteria demonstration.

7 Q. Okay. And could you please turn to the very
8 last page?

9 A. I'm there.

10 Q. Great. And could you please read for us the
11 very last sentence of that page? It starts with based on
12 this information?

13 A. It says based on this information --- but I
14 think it's important to read the whole paragraph.

15 Q. All right. Please do.

16 A. It's not that long. The impoundment embankment
17 is constructed of compacted fly ash, bottom ash and
18 compacted clay soils. The floor of the impoundment
19 consists of in place soils, some of which may be native
20 clay soils. However, the hydraulic conductivity of the
21 soil is unknown.

22 McElroy's Run impoundment was permitted by West
23 Virginia Department of Environmental Protection, I'm
24 assuming, WVDEP to be constructed without a liner system.
25 Based on this information McElroy's Run impoundment has

1 been determined to be an existing unlined CCI service
2 impoundment pursuant to the 40 CFR part 257.

3 Q. So under the cause rule this impoundment is
4 unlined; correct?

5 A. I don't know that.

6 Q. Okay. Is it possible that an unlined
7 impoundment in which coal ash is being stored could cause
8 contamination of groundwater that the owner of the
9 impoundment would be required to clean up?

10 A. I think that's hypothetical and I think that
11 you'd have to --- to answer that really properly and to
12 get where you really want to go to is know what the
13 monitoring wells are showing you.

14 Q. Okay. And if the monitoring wells were showing
15 contamination including coal ash constituents is it
16 possible that the owner of the impoundment would be
17 required to close the impoundment by a method other than
18 capping in place?

19 A. Possibly.

20 Q. Okay. Are you aware of a federal court ruling
21 this summer that requires the Tennessee Valley Authority
22 to excavate a coal ash pond because pollutants had been
23 seeping into it ---

24 A. No, I ---.

25 ATTORNEY PRESLEY:

1 Objection.

2 BY ATTORNEY LEE:

3 Q. --- have been --- have been seeping out of it?

4 ATTORNEY PRESLEY:

5 Objection. Mr. Leutheuser has already
6 stated that he's not familiar with those --- those
7 situations and that's all I have. Documents. I mean, if
8 Sierra Club wanted these documents in the record it could
9 have had its witness sponsor testimony about it and ---.

10 ATTORNEY LEE:

11 We're responding to the --- the witness
12 that you've put up about environmental compliance issues
13 and I'm asking a question about publicly available
14 information.

15 ATTORNEY PRESLEY:

16 He's not --- he's not testifying about
17 that. He's testifying about the stuff in his report.

18 CHAIRMAN:

19 All right. Ask your question again.
20 Hold on. Are you asking him if he was familiar with
21 this?

22 BY ATTORNEY LEE:

23 Q. Are you aware of the federal court ruling from
24 this summer that requires the Tennessee Valley Authority
25 to excavate a coal ash pond because pollutants had been

1 seeping out of it?

2 A. No, I'm not.

3 Q. Okay.

4 CHAIRMAN:

5 I'm sorry. What did you say?

6 A. No, I am not.

7 CHAIRMAN:

8 There you go.

9 BY ATTORNEY LEE:

10 Q. Are you aware that Duke Energy is excavating a
11 number of its coal ash ponds in North Carolina?

12 A. No, I am not.

13 Q. In general do you know if excavation of a coal
14 ash impoundment would typically involve significantly
15 greater costs than capping the impoundment in place?

16 A. I'm taking this as a hypothetical question.

17 Q. Sure.

18 A. And the answer is it's possible.

19 Q. So I'm looking at your report, pages 3-9 to
20 3-11.

21 A. Okay.

22 Q. Is it fair to say that those three pages are
23 where Black and Veatch's evaluation of environmental
24 issues are contained?

25 A. Yes, it is.

1 Q. Okay. And we've just looked at the AE Supply
2 proposal that also included three pages of environmental
3 issue discussion; is that right?

4 A. I'm sorry. I'm just double checking myself on
5 the report. Okay. What was --- what was the follow-up
6 question?

7 Q. Follow-up question, Sierra Club Cross Exhibit 6,
8 that AE Supply, is it fair to say that the three pages
9 there represent discussion of environments of compliance
10 issues?

11 A. Well, as I stated before I don't know if this is
12 all we had or not.

13 Q. Okay. Well, if you --- fair enough.

14 ATTORNEY LEE:

15 That's all I have.

16 ATTORNEY PRESLEY:

17 Yes. Can we have a minute to consult
18 for Redirect?

19 CHAIRMAN:

20 Sure.

21 ATTORNEY LEE:

22 Sir, if I could just move those
23 exhibits into the record, please.

24 ATTORNEY PRESLEY:

25 Objection.

1 CHAIRMAN:

2 All of them, some of them?

3 ATTORNEY PRESLEY:

4 Yes, I think it's Cross-7, 8 and 9,
5 Sierra Club 7, 8, 9.

6 CHAIRMAN:

7 The letter to the Maryland, the EPA,
8 the impoundment design?

9 ATTORNEY PRESLEY:

10 Yes, I believe that's what the
11 three ---.

12 ATTORNEY LEE:

13 Your Honor, Mr. Leutheuser's Direct
14 testimony includes an opinion on the evaluation of
15 environmental aspects of the plant including annual
16 emissions rates and compliance with air rules.

17 CHAIRMAN:

18 I'm inclined to let these in. I mean,
19 it's --- we've been talking about them for three hours
20 now with --- and, you know, you can --- each side can
21 make out of them what they want.

22 ATTORNEY LEE:

23 Thank you.

24 ATTORNEY PRESLEY:

25 All right. Can we have a second

1 consult about Redirect?

2 CHAIRMAN:

3 Yes.

4 ATTORNEY PRESLEY:

5 Thank you.

6 REDIRECT EXAMINATION

7 BY ATTORNEY PRESLEY:

8 Q. Okay. Mr. Leutheuser, you were asked some
9 questions about the scope of your review today; is that
10 correct, Black and ---

11 A. That's correct.

12 Q. --- Veatch's review?

13 A. That's correct.

14 Q. Okay. And were you aware that MonPower was a
15 former owner of the Pleasants plant?

16 A. Yes, we were.

17 Q. Okay. So MonPower was familiar with this asset
18 when it asked you to conduct the evaluation?

19 A. That is correct.

20 Q. Okay.

21 A. And that was actually beneficial to us because
22 that gave us a leg up on performing our work so that we
23 could have spent more time with looking for things that
24 were problems because we didn't come in necessarily cold.

25 Q. Okay. And --- and were you at the Black and

1 Veatch site visit back in February?

2 A. I was not.

3 Q. And --- and why were you not there?

4 A. My attendance would have been redundant. I set
5 of team of people that were senior engineers that were
6 experienced in doing these types of evaluations and my
7 attendance would have been redundant.

8 Q. Okay. So you pretty much see yourself as the
9 generalist of the group to receive everything when you
10 had people to specialize in certain areas to go to
11 the ---?

12 A. That is correct.

13 Q. Okay. And why do you think your team was
14 adequate to review the proposal for misrepresentations or
15 serious flaws or --- or things of that nature that you
16 were asked to review by MonPower?

17 A. The people we had go, as I said, were
18 experienced in reviewing coal-fired power plants, and
19 emission controls, performance enhancements and they had
20 experience across a variety of plants and locations in
21 the Midwest. Thought they were a good fit for what the
22 task was at hand here.

23 ATTORNEY PRESLEY:

24 Okay. We have nothing further.

25 CHAIRMAN:

1 Commissioners?

2 COMMISSIONER LARRICK:

3 No questions.

4 CHAIRMAN:

5 Mr. Leutheuser, I've been doing this a
6 long time and I've become absolutely jaded. We do these
7 projects and the Company comes in and says they're
8 essentially made of stainless steel, will last forever
9 and there's nothing absolutely wrong with them. And we
10 --- we get other people walk in and say they're about to
11 fall down.

12 We had people at the public comment
13 hearings who worked at the plant, said that it was
14 pristine and in good condition. So I get a little
15 concerned when I start hearing the kind of things I've
16 heard here. I want you to tell me based on what Black
17 and Veatch has done and give me a level of comfort.

18 If I wanted to approve the sale of this
19 --- of this facility how would I know that I'm not ---
20 and I know there's no guarantees in life, but how will I
21 know based on Black and Veatch's review that this is an
22 operationally sound plant that is capable of carrying out
23 the --- the charge that the proposed purchasers and the
24 seller --- the proposed purchasers have made about it? I
25 mean, are we buying a pig in a poke or are we --- are we

1 buying a sound operating plant or ---?

2 A. I don't --- I don't believe so. I --- when we
3 were ---.

4 CHAIRMAN:

5 Wait. You don't believe so what?

6 A. That you're buying a pig in a poke.

7 CHAIRMAN:

8 Thank you, sir.

9 A. When we --- when we were charged with the task
10 here, initial charge was to actually have MonPower take a
11 look at the proposals received and be prepared to do an
12 evaluation of maybe two plants that made a short list.
13 And we were, you know, prepared to by mid-February when
14 the proposals would be in and reviewed, be ready to ---
15 to jump on it, if you will. At that time we were just
16 told to look at the one plant and so we --- we received
17 all the information, scoured through it. We visited the
18 plant.

19 CHAIRMAN:

20 When you say we received all the
21 information you mean the ---?

22 A. The 56 or 51, the 50-some exhibits of
23 information that showed that the plant was being ---.

24 CHAIRMAN:

25 You received them at the plant?

1 A. No, received them ahead of time, the week
2 before.

3 CHAIRMAN:

4 All right.

5 A. And in those documents we could tell that there
6 was inspections being made. They were addressing issues
7 that they had found in those inspections that they were
8 dealing with problems that were occurring in the
9 operations and maintenance.

10 They were addressing issues that would be
11 potentially limiting their availability rates and the
12 interviews we had with the plant operations people
13 supported all of that. The fact that it's been
14 continually modernized over time is an indication that
15 the plant's not just been sitting idle. It's been a
16 valued asset and they're continuing to make investments
17 in it. I had the opportunity Monday afternoon to stop by
18 the plant myself because I wanted to see if it was a well
19 maintained, modernized facility for my own eyes. And I
20 found that the plant did come across as that type of a
21 --- as being represented that way.

22 CHAIRMAN:

23 Which way?

24 A. Modernized and well maintained.

25 CHAIRMAN:

1 I'm sorry. It did not come across that
2 way?

3 A. No, it did.

4 CHAIRMAN:

5 Okay.

6 A. It did come through. So there's nothing that's
7 contrary to our report that would indicate anything
8 different than that. They're in an outage right now in
9 unit one. They are going through --- Seamans is going
10 through an outage on a turbine.

11 They had the LP rotors out, so they're --- they
12 are going through the scrubber area, taking care of
13 maintenance there, and also had kind of unique situation
14 where I could see unit one in an outage situation and
15 unit two operating. So I was able to walk in the control
16 room, see the fact that the controls been updated, the
17 elevation system here. I think it was in 2010. I think
18 it's about seven years old, modern system.

19 CHAIRMAN:

20 Wait a minute. I'm never afraid to
21 admit --- ovation?

22 A. Ovation is a system that Emerson sells for power
23 plants and other systems for --- for DCS. So it's got
24 current DCS controls in it. The scrubber area's got a
25 --- a ten year old control system in it, so it's --- it's

1 running. I could see on the monitors where the dry cake
2 material for the gypsum, for the off take for the gypsum
3 was --- was coming off the belts.

4 So you can tell everybody there at the plant is
5 engaged in doing a good job and very --- it's a very
6 alive facility. Everybody's taking pride in the plant,
7 so I --- it's a --- it's a going concern. And I learned
8 through the testimony today or listening to testimony
9 today that it's been a moneymaker.

10 I wouldn't think that the buyer would be
11 interested in a plant that wasn't a moneymaker especially
12 for the price being offered. But we had no commercial
13 evaluation responsibilities, so we have to rely on others
14 to make that determination, whether or not this is a good
15 deal. But it's --- but it's a --- I appears to be a good
16 plant.

17 CHAIRMAN:

18 There were questions asked of you on
19 --- if you had seen some documents and --- and you said
20 no in many instances. Is that because other --- you were
21 relying on others to see them or simply you didn't know
22 they existed or ---?

23 A. I was relying on others and I don't have the
24 details as to the work that was done to go into the
25 report.

1 CHAIRMAN:

2 There was a little discussion that I
3 wrote down what was said because I was curious as to what
4 exactly you two were talking about if I can find it.
5 There were a series of questions where you were asked and
6 they were all, I think, premised on as a matter of
7 general principles. And you were asked a bunch of
8 questions about engineering and --- and plant operations
9 I think.

10 And you said following your line of
11 reasoning and you agreed to that --- that group of
12 questions. And I was trying to figure out what did you
13 mean --- I mean, it was --- it was --- it was conditioned
14 on as a matter of general principles. And you said
15 following that line of reasoning. What exactly were you
16 saying when you --- when you were answering those
17 questions?

18 A. Well, the ---.

19 CHAIRMAN:

20 Because you agreed with most of them.

21 A. What --- what was being proposed to me was ---
22 was a reasonable line of --- of thought and so the reason
23 I said hypothetically was because I didn't know if that
24 applied specifically to this situation. So that's why I
25 said hypothetically.

1 CHAIRMAN:

2 Okay. And you had an electrical
3 engineer, a mechanical engineer and a capital X, capital
4 expenditures engineer and an air quality guy. He was one
5 --- he was one in the same I think?

6 A. Well, yes. I --- you know, the résumés to the
7 people are --- are attached to the --- I think they might
8 be attached to the --- to the Rebuttal or something.
9 There's --- in one of my testimonies there's --- there's
10 some résumés, but the key folks that were involved there.
11 We had somebody that we felt was going to do a proper job
12 for the task at hand.

13 CHAIRMAN:

14 And on page three of your Direct
15 testimony there was a question asked of you find anything
16 inconsistent with the representations made in the
17 proposal. And you --- you basically said that the
18 technical data provided appears reasonable and
19 appropriate for a facility of the age --- the type and
20 age consistent with the observations and information
21 gained from the site visit.

22 I'm trying to assess, are you saying
23 that the plant for its age is in good shape or are you
24 saying --- you used the term modernize, which was the
25 subject of some back and forth earlier?

1 A. Correct.

2 CHAIRMAN:

3 By modernize do you mean that it's been
4 --- it's been brought up to a level that you think is
5 satisfactory or does it --- does it have more to go or
6 how --- how do we judge what --- what's been said about
7 the plant at this stage?

8 A. The plant's been brought up to standards for
9 current operation and it's been done --- it's been shown
10 that it's been done over a prolonged period of time in
11 recent history, so --- so I don't think the plant --- it
12 doesn't appear that the plant was let go and then there's
13 been sort of --- something's been ---.

14 CHAIRMAN:

15 That's a pretty low bar. As you said,
16 it was not let go. I mean, is --- is ---?

17 A. Yeah, I said the plant was not let go ---

18 CHAIRMAN:

19 Yeah.

20 A. --- both in the past or --- it seems like it's
21 been a continual attention paid to this plant.

22 CHAIRMAN:

23 Have you done inspections of plants
24 before? I think you all indicate --- you indicated that
25 you had ---?

1 A. The people that I had --- the people that I do
2 --- that we had do the report have. My personal
3 experience is that I've worked on power plants that are
4 primarily new. I did an 800 --- it was an 800 megawatt
5 plant back in the late '70s, two 400 megawatt coal plants
6 in the early to mid-'80s, a 200 megawatt plant about
7 eight to ten years ago. Those were all new construction.

8 I also worked on a --- one of my projects was to
9 do a MAPS compliance project in 100 megawatt plant about
10 a year ago. And I've also been working on some air
11 quality projects on plants that range from being built
12 around 1960 to the late '70s. So I've been in a number
13 of plants.

14 CHAIRMAN:

15 I had underscored when I was reviewing
16 your testimony that some highlights of our achievement or
17 our involvement in installation of over --- of nearly 130
18 major coal units. I take it that's Black and Veatch in
19 total?

20 A. That's correct. That's corporate wide.

21 CHAIRMAN:

22 All right. The --- the question was
23 asked about the --- the impoundment and the situation
24 that it's been called at every opportunity a dangerous
25 impoundment. Do you know how that term is defined as

1 used by the EPA?

2 A. No, I do not.

3 CHAIRMAN:

4 All right. All right. Thank you, sir.

5 A. Thank you.

6 CHAIRMAN:

7 It is 5:57. Shall we continue on with
8 another witness or ---?

9 ATTORNEY ROBERTS:

10 I think we can probably finish another.

11 CHAIRMAN:

12 Huh?

13 ATTORNEY ROBERTS:

14 I think we could finish another in
15 short order.

16 CHAIRMAN:

17 I'm sorry?

18 ATTORNEY WILLIAMSON:

19 I wouldn't suspect there isn't a whole
20 lot from Mr. Evans if that's who's next.

21 CHAIRMAN:

22 Well, call your next witness.

23 ATTORNEY JACK:

24 The Company calls Mr. Dale Evans.

25 -----

1 DALE EVANS, HAVING FIRST BEEN DULY SWORN, TESTIFIED AS
2 FOLLOWS:

3 -----

4 DIRECT EXAMINATION

5 BY ATTORNEY JACK:

6 Q. Good afternoon, Mr. Evans.

7 A. Good afternoon.

8 Q. Would you please state by whom you're employed
9 and in what capacity?

10 A. Sure. I'm employed by FirstEnergy Service
11 Corporation. I'm a technical services manager at
12 Pleasants Power Station.

13 Q. And what do you do as a technical service
14 manager at Pleasants Power?

15 A. At Pleasants Power Station as a technical
16 services manager we look at operations, maintenance
17 characteristics, performance of the units and the plant
18 in general, look at O&M, cap back budgets. Basically
19 environmental safety concerns, anything like that.

20 Q. Okay. Did you cause to be filed in this
21 proceeding a piece of Rebuttal testimony?

22 A. I did.

23 Q. All right. Mr. Evans, do you have any additions
24 or corrections to that?

25 A. I do not.

1 Q. If I were to ask you the questions that are in
2 your Rebuttal testimony would your answers be the same?

3 A. Yes, they would.

4 Q. And you adopt that as your sworn testimony here
5 today?

6 A. Yes, sir.

7 ATTORNEY JACK:

8 Thank you. Witness is available for
9 Cross and the Companies move his testimony.

10 (Companies Exhibit DE-R marked for
11 identification.)

12 CHAIRMAN:

13 All right.

14 CROSS EXAMINATION

15 BY ATTORNEY ROBERTS:

16 Q. Good afternoon, Mr. Evans.

17 A. Hi there.

18 Q. You testified that you expect McElroy to close
19 in about 10 or 11 years; is that correct?

20 A. That's correct.

21 Q. Were you aware of Mr. Lee's a Company witness
22 testimony that McElroy could close as soon as seven
23 years?

24 A. The original estimate was 6 to 7 years. The
25 newest estimate is 10.67 years.

1 Q. Okay. Thank you for clarifying that. And, Mr.
2 Evans, if this transaction is not consummated and the
3 plant is closed will you have a job?

4 A. No, ma'am.

5 ATTORNEY ROBERTS:

6 Thank you. No other questions.

7 CHAIRMAN:

8 All right.

9 ATTORNEY SOULES:

10 Thank you, Your Honor.

11 CHAIRMAN:

12 All right.

13 CROSS EXAMINATION

14 BY ATTORNEY SOULES:

15 Q. Good afternoon, Mr. Evans. My name is Michael
16 Soules.

17 A. Hi there.

18 Q. Hi. All right. Just a few very quick
19 questions. On page 11 of your Rebuttal testimony you
20 mentioned that the materials going to McElroy's Run
21 consist of scrubber sledge; correct?

22 A. That's correct.

23 Q. McElroy's Run also receives discharge from the
24 dewatering of the bottom ash; correct?

25 A. That's incorrect.

1 Q. That's incorrect? Where does the water from the
2 --- the sedimentation ponds associated with the bottom
3 ash go to?

4 A. The bottom ash is what's loose out of the
5 boiler. From the boiler it is carried into hydro bins
6 where it is dewatered. That water is either reused,
7 overflowed or goes into a batch waste system where it's
8 treated. And the ash is hauled to the disposal facility.

9 ATTORNEY SOULES:

10 Okay. Thank you. No further
11 questions, Your Honor.

12 ATTORNEY NAUM:

13 No questions.

14 ATTORNEY HANNA:

15 No questions.

16 CROSS EXAMINATION

17 BY ATTORNEY MCGHEE:

18 Q. Sorry to disappoint. I do have some questions,
19 but I am appreciative that your last name is Evans. You
20 indicated that you work for FirstEnergy Service Company
21 and I take it that you work at the Pleasants plant;
22 correct?

23 A. That's correct.

24 Q. Who owns the Pleasants plant?

25 A. The plant would be owned by FirstEnergy,

1 FirstEnergy Service Corporation.

2 Q. Well, FirstEnergy Service Corporation, the
3 company you work for also owns the Pleasants plant?

4 A. I don't know the complete ownership of the
5 plant.

6 Q. Is it your general understanding that the
7 company you work for is the company that owns that plant?

8 A. That's correct.

9 Q. In your Rebuttal testimony at page one you
10 indicate, line six, that you assist with a number of
11 maintenance and capital projects. And my question is,
12 who is it that you assist?

13 A. As a technical services manager we provide
14 insight and input to both the site operations and
15 maintenance departments. I'm responsible for a staff of
16 15 engineers or technical folks at the site. They are
17 not all engineers. They're all technical folks and that
18 is who I assist.

19 Q. And on page 2 towards the bottom, lines 18 and
20 22 you make several references to Pleasants --- Pleasants
21 employees regimented inspection program or balances,
22 capital expenses and O&M. And my general question is,
23 who do you mean when you refer to Pleasants? Is it the
24 company that employs you that you believe also owns the
25 plant?

1 A. I don't see the reference you're referring to,
2 but yes, in general.

3 Q. So that you can be comfortable with that it's
4 page 2 of your testimony beginning at page --- line 18.

5 A. Okay.

6 Q. And there's a couple of sentences that begin
7 Pleasants and then it goes on to say what Pleasants does?

8 A. That's correct.

9 Q. And looking at that same area at the bottom of
10 page two of your testimony you list a number of programs
11 that are employed. Is it --- do you agree that those
12 programs don't eliminate problems, but that they help
13 with early detection to help avoid and fix those
14 problems?

15 A. That is correct.

16 Q. Over on page 3 of your testimony, particularly
17 at line 14 there's reference to capital projects that are
18 evaluated on economic justification model to ensure cost
19 effectiveness. Who is it that makes the decision as to
20 what is cost effective?

21 A. I'll describe a process. Essentially the
22 technical services group at the plant is responsible to
23 identify those projects. Once those projects are
24 identified there's documentation that explains those
25 projects that is compiled. That --- that compiled

1 documentation is then forwarded to the director of the
2 station as well as corporate management to look at,
3 consider and review.

4 Part of that documentation includes what we call
5 a cart model, which is a --- the financial model that you
6 refer to. And it's --- the project is evaluated based
7 essentially on payback.

8 Q. Directing you further into the testimony and
9 over on page four there's reference to what I'll
10 pronounce as HILP, the high impact low probability. And
11 my question is, you note that HILP events are typically
12 associated with new materials like T91 and newer
13 components or new components. Can you provide us an
14 example of a T91 material HILP event?

15 A. I can't provide you with a T91 material HILP
16 event. I can provide you with an event involving T91
17 material in a --- in a power station where I formerly
18 worked. In that --- in that event T91 headers were
19 installed in place of P22 headers, which were original
20 equipment. A T91 material, the reason it's installed
21 over the P91 (sic) material is typically due to the size,
22 weight and so forth of the component, in this case a
23 boiler header.

24 That component with that --- that's essentially
25 a nine percent chrome material. With that component the

1 thickness of the header would be approximately one and a
2 half to one and three-quarter inches versus the original
3 P22 header thickness of about four inches.

4 So there is --- if efficiency's to be gained to
5 install the material the operation and maintenance of
6 that material after the original installation is what I
7 would refer to as causing additional maintenance and ---
8 and work.

9 Q. Would you agree with me that HILP events can
10 also occur with old materials as well?

11 A. Sure.

12 Q. Would you agree that HILP events are more likely
13 to occur as materials age?

14 A. That's a potential, yes. Not always the case,
15 but yes, that's a potential.

16 Q. Would you agree that HILP events can include the
17 possibility of things like human error or an impoundment
18 failure?

19 A. Certainly could.

20 Q. Going over to page 7 of your testimony, it looks
21 like beginning at line 16 you disagree with Longview
22 witness Kumar that creep is a concern at the Pleasants
23 plant. Is that a fair characterization of your
24 testimony?

25 A. I think we have to look at what creep is. Creep

1 is something that happens over time. It is influenced by
2 heat and the stresses and forces apply to whatever the
3 component is. It's a concern in any plant. Specifically
4 what this refers to is creep a concern or a large problem
5 at the Pleasants plant. And I would say no.

6 The reason I would say no is because your ---
7 your temperature --- for example, your super headers,
8 reheat headers higher temperature materials, they are
9 looked at through ---. You referenced the programs on
10 the first page or second page, the MIC component health
11 reports, working with OEMs as well as EPRI, Electric
12 Power Research Institute. And there has been no major
13 concerns or problems on any header within Pleasants Power
14 Station relative to creep.

15 Q. Is it your testimony that creep does not exist
16 at the Pleasants plant?

17 A. No, it does exist. Creep --- creep exists
18 anywhere. It can be a brand new plant and you can have
19 creep.

20 CHAIRMAN:

21 How do you know if you have creep? I
22 wrote that in --- all this stuff about creep. I wrote it
23 down. How do you know you have creep?

24 A. What you do during a planned outage and that's
25 every three years on these units, you go into the areas

1 where you would normally suspect or expect to see the
2 creep. Well, what you do is you do non-destructive
3 examination of the header in this case.

4 So what that means you --- you may be doing UT,
5 ultra sonics, you may be doing linear phased right or you
6 may be doing a replica test. All those are in the E
7 techniques in which components are examined to make sure
8 that you don't have that concern.

9 For instance, when you do a replica test on a
10 header typically the header is sandblasted to a white
11 metal finish during the outage. After that header is
12 sandblasted to white metal finish during the replica test
13 you actually polish that header to a mirror finish in
14 several areas. And what you do is I'll --- I'll say you
15 apply a tape.

16 It's a special tape, but in applying that tape I
17 will actually look at the grain structure and grain
18 boundaries on that header to identify the condition of
19 the header material versus what would be expected in a
20 new material.

21 CHAIRMAN:

22 Sorry.

23 ATTORNEY MCGHEE:

24 No problem.

25 BY ATTORNEY MCGHEE:

1 Q. Following up on that general question would you
2 agree that monitoring for creep is an expense?

3 A. Sure. That expense is much less than a
4 catastrophic or an HILP as you refer to.

5 Q. And that's one of the reasons that you look for
6 it is to avoid the existence of an HILP event; correct?

7 A. That's right.

8 Q. One of the items that's been provided in this
9 case, the testimony that was just provided was the Black
10 and Veatch report, which notes at page 3-2 and --- are
11 you generally familiar with the Black and Veatch report
12 and that there was an inspection of your plant?

13 A. There was an inspection of the plant. I'm aware
14 of the actual inspection that took place earlier this
15 year. I am not aware of and I have not seen that report.

16 Q. Referring to page 3-2 of that report, let me
17 read a section to you. Black and Veatch reviewed the
18 boiler outage reports for unit one and unit two in order
19 to understand that the condition of the boilers and any
20 failure mechanisms and resolutions to them. There are
21 two main mechanisms present.

22 One, fire side to erosion from sliding ash
23 and/or soot blowing impingement and, two, creep life
24 failure of the finishing super heater. Would you agree
25 that the boiler life is impacted by creep life failure at

1 the finishing super heater?

2 A. Normally I would say, yes, the finishing super
3 heater has been replaced on unit two. It is actually due
4 for replacement on unit one as well.

5 Q. If a boiler tube or --- well, let me ask first.
6 Do boiler tubes sometimes fail?

7 A. Correct.

8 Q. When they do at the Pleasants plant is the plant
9 immediately shut down or does it continue to operate
10 until a later time?

11 A. If it continues to operate in --- to a later
12 time it will be a short time. That's a once through
13 boiler. Your --- your pressures are running --- just for
14 your information, running 3,850 pounds, 1,010 degrees.
15 So when you get one tube that's running that kind of
16 pressure and temperature you may --- you may operate for
17 hours. You won't likely operate for days or weeks, not
18 likely.

19 Q. You anticipated the follow up. Thank you. Over
20 on page 8 of your testimony beginning at pages --- lines
21 15 through 19. You indicate that Pleasants is not used
22 in cyclical operation mode, but operates in a band of 300
23 to 650 megawatts. When you refer to Pleasants not being
24 a cyclical operated plant does that mean it's not
25 routinely turned on and off, but simply the volume goes

1 up and down?

2 A. That is correct. When I say cyclical typically
3 that means plants shutting down, starting back up. So
4 what you have is a plant that's an operating pressure and
5 temperature going to ambient pressure and temperatures,
6 and then returning. That's a large factor in your creep
7 failure that we previously discussed.

8 Pleasants station is a baseload station load
9 following. When you said 300 to 650 megawatts what that
10 means is all of my feed water conditions, my steam
11 temperature conditions, basically all my operating
12 parameters are maintained down to that point. When I go
13 less than 300 megawatts, which we do not do, you will
14 have to --- you have to start altering the operations.

15 In this case we'll just say take a boiler feed
16 pump out of service. You have less feed water flow,
17 pressure demand. So what I mean by that is we operate
18 300 to 650 load following.

19 Q. Is one of the reasons that you don't operate
20 below 300 megawatts is that would be damaging to the
21 plant?

22 A. It could be damaging to the plant if you go
23 outside of the design operating parameters and
24 recommendations by the OEMs, yes, sir.

25 Q. Can you estimate what percentage of the time the

1 plant operates at a level below 500 megawatts?

2 A. I'm not --- I would hate to even estimate.

3 Q. Fair enough. And by way of example, when the
4 plant is operated at a --- within the band that you've
5 identified that it operates at a lower megawatt output
6 are certain parts of the plant turned off? For instance,
7 the mills that pulverize the coal, do you have to shut
8 down some of those pulverizers when you come down to a
9 lower level?

10 A. In some instances you may have to take one coal
11 mill out, yes.

12 ATTORNEY MCGHEE:

13 I believe that's all I have. Thank you
14 for your time.

15 A. You're welcome.

16 CROSS EXAMINATION

17 BY ATTORNEY AUVILLE:

18 Q. Good evening, Mr. Evans.

19 A. Hi there.

20 Q. I just have one --- one quick section of
21 inquiry. Can you turn to page 12 of your testimony?

22 A. Okay. I'm there.

23 Q. And starting there on about line three you start
24 talking about the remaining life of the McElroy's Run
25 impoundment and continuing on to the next paragraph you

1 --- you conclude that the plant itself is going to last
2 longer than the life of the impoundment.

3 And starting on line seven you say that
4 Pleasants will install best available technology
5 equipment to produce dry material. Is there any reason
6 why that best available technology can't be installed
7 now? Is there a technical or operational reason why that
8 can't be done now?

9 A. There sure is.

10 Q. What is that?

11 A. I mean, to clarify we've talked about ash and
12 impoundments for two days now. I need to clarify what we
13 have at Pleasants Power Station and then I'll get into
14 that. The McElroy's disposal area consists of basically
15 a dry landfill and a wet impoundment. The material that
16 goes to the wet impoundment since that's what we're
17 talking about, essentially is gypsum effluent. The
18 station produces gypsum and it's sold to a wall board
19 manufacturer. That said, that effluent that comes off of
20 that gypsum is a liquid product very much like your cup
21 of water.

22 It does have solid material in it, some, very
23 few. If you were to look at it, like I said, it would
24 look like water. That material is pumped to the wet
25 impoundment. That's the only thing that goes to that wet

1 impoundment today. Previously due to a change in the
2 scrubber process the scrubber effluent is what went to
3 that wet impoundment. Essentially somebody referred to
4 it as a scrubber sludge.

5 That material was pumped from the gypsum area to
6 the wet impoundment. In recent years our operation has
7 changed. We have mag hydroxide production system. At
8 any rate, we are pumping essentially a --- a liquid
9 looking material to the impoundment. Now, as far as why
10 not shut the impoundment down now? The original
11 impoundment both dry and wet were constructed during the
12 construction of Pleasants Power Station.

13 I have a wet impoundment area. What makes that
14 area knowing that I'm running out of space in 10.67 years
15 I better have plan B ready to go, I need to fill that
16 impoundment area up to make sure that it's stabilized.
17 And what I mean by stabilized is the solids in the
18 material that I pump even though it may look like water,
19 settle. That --- those solids compact inside of that
20 impoundment.

21 What that does is produces a solid or more
22 steady fill, if you will, and what it also does is
23 impacts my stormwater runoff, number one. Number two, it
24 --- it minimizes subsidence around that area associated
25 with that wet impoundment if there is any. There is no

1 subsidence issue today, never has been, but for those
2 reasons is why I would not want to shut that impoundment
3 down prior to that recommended time.

4 Q. But, of course, if it was close --- if --- if it
5 was no longer used and it was closed that wouldn't be a
6 problem because that would be --- the issue that you just
7 spoke of would be taken care with the closure costs?

8 A. Yeah. So let me --- let me expound on that a
9 little bit. So we've heard a \$45 million number
10 associated with the closure. Okay? What that number
11 does it applies to --- we've talked about cap backs and
12 off backs.

13 So when I install my capital equipment that I'm
14 going to use to now produce a dry material rather than
15 pump that liquid that we talked about to the landfill I
16 will fill --- I will utilize my disposal area with that
17 dry material. The landfill will then be closed, capped,
18 whatever the environmental guidelines and done.

19 Q. Right. But there --- there's been an expansion
20 of the --- the dry landfill; is that correct?

21 A. The dry landfill potentially can be expanded,
22 yes, sir.

23 Q. Okay. Hold on just a second. So what would
24 happen to McElroy's Run if the plant closed tomorrow?
25 What would happen with it?

1 A. If the plant were to close tomorrow there would
2 --- there would have to be a --- what I would call an
3 expedited plan to look at how are we going to stabilize
4 and ensure that that impoundment is safe and left in a
5 safe condition and environmentally sound condition.

6 ATTORNEY AUVILLE:

7 Okay. I think that's all I have.
8 Thank you.

9 ATTORNEY LEE:

10 Just a few questions.

11 CROSS EXAMINATION

12 BY ATTORNEY LEE:

13 Q. Hi there, Mr. ---

14 A. Hi.

15 Q. --- Evans. My name's Bridget Lee. I'm
16 representing the Sierra Club. I'll try to get through
17 these pretty quickly. Do your responsibilities at
18 Pleasants include working to improve the performance of
19 the plants in pollution controls?

20 A. My technical services group is responsible to
21 look at all environmental controls on a daily basis.

22 Q. Thanks. And in your experience can improvements
23 to those controls result in increased O&M costs?

24 A. Potentially. I wouldn't want to say yes in
25 every instance, but potentially.

1 Q. Fair enough. In your experience do rates of
2 emission for nitrogen oxides vary depending on the time
3 of year?

4 A. They can and the reason I say that is
5 essentially because you have an ozone season and a non-
6 ozone season. It's just like when you have public --- in
7 the newspaper, don't mow your lawn until after 4:00 p.m.
8 through the summer months. Well, that's nice, but that
9 corresponds with the ozone season as well.

10 So May through September every year is ozone
11 season. We meet the guidelines with respect to what's in
12 our Title 5 air permit during that time. Non-ozone
13 season are the other months.

14 Q. I got you. So you have the ability between May
15 and September to run the controls better, for lack of a
16 better term, than --- than they would be run during the
17 winter or more robustly stronger?

18 A. I operate and run those controls and we oversee
19 this on a daily basis to ensure that I'm within my Title
20 5 permit at all times.

21 Q. Okay. But you can vary --- yes.

22 A. You --- you can vary.

23 Q. Okay. Thank you. And are you aware of the
24 concerns raised by Maryland with respect to emissions for
25 the plant?

1 A. I've heard about it in the newspapers.

2 Q. Okay. In your rebuttal testimony, and you don't
3 have to turn to it, you mention that you've worked with
4 EPRI and CH2M to identify best available technology
5 options. As part of that work have you developed any
6 potential engineering or design plans for best available
7 technology options?

8 A. You're talking about effluent limit
9 guidelines ---

10 Q. I am.

11 A. --- at this point?

12 Q. Yes.

13 A. Please repeat your question.

14 Q. Sure. As part of the work you've referenced
15 doing with ERPI and CH2M, have you or anybody in that
16 group prepared engineering or design plans for compliance
17 with the ELG rule?

18 A. We have not and I would like to comment on that.

19 Q. Sure.

20 A. The ELG rule deals specifically with mercury
21 within water. When I ---

22 Q. Does it do --- oh, I'm sorry. Go ahead.

23 A. --- when I --- when I look at that I know I look
24 at the technology that's available to help me treat my
25 system, my streams such as my bottom ash and my scrubber,

1 wastewater, items that would come out of a sump. And I
2 have to come up with a --- basically a dry product or a
3 product such that I can do something with it rather ---
4 in conjunction with that I may have to clarify a stream
5 of water or, you know, make that high quality water.

6 Well, in doing so the technology to do that is
7 being developed and, in fact, is what I would say on the
8 cutting edge of coming out and available to the stations.

9 Q. Are you aware of any plants that have technology
10 that can do what you've just described already installed?

11 A. I'm not aware of one plant that has that
12 technology installed.

13 ATTORNEY LEE:

14 Okay. That's all I have.

15 ATTORNEY JACK:

16 Just a couple Redirect.

17 REDIRECT EXAMINATION

18 BY ATTORNEY JACK:

19 Q. You got a number of questions about
20 impoundments, the McElroy's Run impoundment. Are you
21 familiar with a classification for McElroy's Run as a
22 high hazard potential coal combustion residual surface
23 impoundment?

24 A. I am. I'm glad you brought that up. As
25 clarification, there are over 600 dams in the State of

1 West Virginia. Over 400 of those dams are classified
2 as ---.

3 ATTORNEY LEE:

4 Object. This is beyond the scope of my
5 questions anyway. I don't know if anyone mentioned high
6 hazard to this witness.

7 CHAIRMAN:

8 He's doing Redirect.

9 ATTORNEY AUVILLE:

10 I think the point is is that ---

11 ATTORNEY LEE:

12 Beyond the scope of the Cross that was
13 just ---.

14 ATTORNEY AUVILLE:

15 --- nobody asked this witness about
16 that dam being a high hazard impoundment.

17 CHAIRMAN:

18 Well, I did. I guess that's --- all
19 right.

20 ATTORNEY JACK:

21 There were many questions about the
22 impoundments and Mr. Leutheuser was asked as well. This
23 is the Company witness from the ---.

24 CHAIRMAN:

25 I haven't asked my questions yet.

1 ATTORNEY JACK:

2 Okay.

3 CHAIRMAN:

4 I haven't asked interested and haven't
5 asked about it. I tend to ask the witness about
6 hazardous impoundments.

7 ATTORNEY JACK:

8 Okay. Very good.

9 CHAIRMAN:

10 So I guess the question is not the
11 question. Move along.

12 ATTORNEY JACK:

13 Okay.

14 BY ATTORNEY JACK:

15 Q. Last question was, you had mentioned several
16 reasons in questions from Mr. Auville as to why the
17 impoundment cannot close down now. And you mentioned one
18 was stormwater runoff reasons, the second one was
19 compaction. Is another reason that if the impoundment
20 was not full it would need to be filled with some sort of
21 fill material ---

22 A. Sure.

23 Q. --- prior to closing which would be an expense?

24 A. That's absolutely right and whatever that
25 material is comes with an associating expense. That's

1 correct.

2 ATTORNEY JACK:

3 No further questions. Thank you.

4 CHAIRMAN:

5 Mr. Evans, I looked at your --- I'm
6 sorry. I looked at your biography, your professional
7 experience and background. You worked seven years at the
8 Mitchell --- Mitchell power station in Monongahela,
9 Pennsylvania?

10 A. That's correct.

11 CHAIRMAN:

12 Seven years at Hatfield, seven years at
13 Fort Martin and now six or --- six years in ---

14 A. Pleasants.

15 CHAIRMAN:

16 --- Pleasants. Those are all coal
17 burning plants?

18 A. That's correct.

19 CHAIRMAN:

20 And have you been --- your BS Science
21 degree in mechanical engineering, I assume you've been
22 assigned in something akin to what you're doing now at
23 least in the operational aspects of it?

24 A. This is what I've done for 27 years.

25 CHAIRMAN:

1 Okay. Let me ask you the same question
2 I asked the gentleman from Black and Veatch and that is,
3 what is the condition of the plant? I mean, we --- you
4 know, we --- we're hearing a lot about environmental
5 problems. I don't --- I don't know that anybody
6 suggested that you're absolutely in compliance with
7 environmental or maybe you are. I don't know.

8 A. We are in compliance and, in fact, we --- we
9 went over three years without any reportable
10 environmental occurrence at that station. Our safety
11 record is just as good and we have gone over three years
12 --- we went over three years without a reportable safety
13 incident at that station.

14 CHAIRMAN:

15 Let's --- let's get the --- the high
16 --- high dam problem out of the way. I'm familiar with
17 this from the earlier proceeding where we had --- that's
18 largely a function of the size of the dam; is it not?
19 Whether --- whether it will --- if it --- if it ruptured
20 it would impact citizens?

21 A. Yes, sir. And to go back, if it's okay, to the
22 --- talking about the dams in West Virginia and as far as
23 those classifications, that's what I'm most familiar
24 with. There are, as I stated, over 600 dams in the State
25 of West Virginia. In classifying those dams in the State

1 of West Virginia you have low impact, satisfactory, or
2 medium type impact and high impact.

3 We've heard comments about high impact or high
4 probability. Well, what that means is if something were
5 to happen to that dam could it result in a human event.

6 CHAIRMAN:

7 Loss of life?

8 A. Loss of life or otherwise. That's why that dam
9 is classified as such.

10 CHAIRMAN:

11 Is --- is a high impact dam a --- a
12 --- a statement or assessment on the danger of the --- of
13 the structure or the stability of the structure of the
14 dam?

15 A. It is not. The dam as it's constructed it is
16 monitored and documented annually by the West Virginia
17 dam inspector, their office. They come onsite for an
18 entire day and walk and look at that dam. In addition to
19 that we have our environmental vendor, third party vendor
20 who comes onsite and also helps manage that. And, in
21 fact, one of my --- one of my staff in my group is
22 assigned to that on a daily basis. Just all
23 environmental aspects that person looks at on a daily
24 basis.

25 CHAIRMAN:

1 Were you --- did you act as tour guide
2 when the folks came around to look at the --- the
3 facility, or were you involved in taking them around to
4 see things or ---?

5 A. A lot of folks have come around. I don't recall
6 them. I assume you're talking about the Black and
7 Veatch?

8 CHAIRMAN:

9 I was talking about the Black and
10 Veatch, and Mr. Kumar and others.

11 A. I was not involved with --- with those tours.
12 One of the persons in my group may have been.

13 CHAIRMAN:

14 Okay. Was there anything that was
15 requested in any of those tours that you all refused to
16 do, or refused to turn over or that you know of?

17 A. Not that I'm aware of. In fact, that's ---
18 excuse me. That's one of the things about that plant in
19 --- in general. We welcome. We work very closely with
20 partners in education and school system as well as the
21 Mid-Ohio Valley Technical Institute. We welcome those
22 folks onsite at any time.

23 CHAIRMAN:

24 The high impact, low probability
25 events, help me out. What --- what is that all about? I

1 hate questions like that, but --- but it sounds like
2 something that's very dangerous, but very serious but
3 there's not likelihood it's going to happen, so ---. And
4 I guess what I'm trying to do is get a sense of when
5 people start talking about HILP events where --- what are
6 we supposed to do? What is the Commission supposed to
7 do?

8 A. So to try to help you with that maybe what I
9 should do would be provide a couple of examples.

10 CHAIRMAN:

11 All right.

12 A. Somebody previously mentioned in 2011 about the
13 Pleasants unit one, main transformer and a bushing
14 failure which led to the failure of that transformer. In
15 fact, that did happen and that's what you would call high
16 impact, low probability event. There was a problem and I
17 don't recall the exact problem with the bushing. At any
18 rate, when the transformer failed Pleasants station does
19 maintain several large spares. And in this case we did
20 have a spare main transformer, so we --- when that
21 happens that unit goes out of service.

22 So for approximately two week period we --- we
23 change that transformer out with a spare. So we take the
24 failed transformer out, put the spare back in place,
25 connect it back up and start the unit back up. That's

1 very simplistic. As far as high impact what that means
2 is it could affect people, equipment.

3 It has typically large financial ramifications
4 and when I say large, so a new transformer of that
5 magnitude it would cost me between \$6 and \$7 million to
6 get that onsite. I had that spare sitting onsite, so I
7 changed it out. Subsequently in, you know, latter year I
8 --- I got a new transformer and there's another spare
9 sitting there.

10 That's just one example of a high impact event.
11 What it did when it --- when you say high impact it took
12 that --- it took the generator out of service. There was
13 no person or people safety problems. Of course, the
14 transformer was damaged. The probability of something
15 like that happening is low to start with and, in fact, on
16 unit two the original transformer's still sitting there
17 in operation with no issues or concerns.

18 The problem that was identified --- this is
19 going back to somebody referred to my various programs I
20 have in place for inspections and so forth. I inspect
21 that transformer, do class, alpha, bravo, Charlie
22 inspections on that transformer as required. And to help
23 ensure its reliable operation and that's why it's still
24 sitting there without a problem today.

25 CHAIRMAN:

1 What is the nexus between age and ---
2 and HILP, high impact --- yeah, high impact low
3 probability events in --- I mean, what do you do to guard
4 against, or watch for or otherwise remediate or --- I
5 guess you remediate, but you --- you --- you take
6 precautions to avoid high impact low probability events.

7 A. So probably to answer that I'll give you another
8 example, if I could. And high impact low probability
9 event took place at a coal barge. All my coal comes in
10 via the river. Coal barge and later head shaft failed.
11 I took my coal barge unloader out of service for five
12 weeks.

13 When something like that happens in working with
14 ERPI, other utilities or otherwise I start talking with
15 first other utilities, ERPI. Find out how can I get
16 help, what resources do I have at my disposal to get that
17 fixed. When, in fact, I found a neighboring utility.
18 Oh, by the way, I have the very same coal barge unloader
19 that you do and this happened to us five years ago.
20 Here's what you need to get it back in service.

21 My point is I'm aware of --- it doesn't matter
22 if you're a brand new plant, an older plant like
23 Pleasants or another utility plant where this happened.
24 It can happen if you're 5 years old, 40 years old or
25 otherwise. In fact, I know that did happen.

1 CHAIRMAN:

2 Well, you told me of two incidences and
3 both incidents you indicate what you did after the fact
4 and --- and how --- how you handled it. What I was
5 trying to assess was is --- is this a class of --- of ---
6 of outage or a class of physical disruption at the plant
7 that --- that you can --- I mean, that you can identify
8 and guard against? Or is it just things happen?

9 A. You identify and guard against as much or
10 everything that you can at that plant. That doesn't
11 guarantee that it's not going to happen. For instance,
12 maybe the chimney at your house falls over. The
13 likelihood of that is very small. Could happen maybe
14 with a lightning strike or something. At any rate you
15 take steps, mitigation steps.

16 Look at preventative type things, inspections
17 that you can do to help identify and mitigate those
18 things prior to them happening. You're not going to be a
19 hundred percent successful though.

20 CHAIRMAN:

21 Is your preventative maintenance
22 program current?

23 A. Absolutely. Our preventative maintenance
24 program, we --- we took the philosophy from Electric
25 Power Research Institute. And, in fact, that is what we

1 use. We develop maintenance basis templates for the
2 equipment and systems in that plant and we have
3 preventative maintenance programs in place according to
4 those templates and what has been identified by EPRI and
5 other utilities to make sure that those events don't
6 happen.

7 CHAIRMAN:

8 You got into a lengthy discussion about
9 cycling operations and increased O&M resulting from that.
10 And you seem not --- you didn't seem to buy that
11 argument. What --- I'm not sure what --- I think I
12 understood what cycling is and --- and why that would
13 necessarily apply, but --- but tell me about cycling and
14 --- and the arguments that are made here about the
15 deficiencies, if any, at Pleasants and its involvement
16 with cycling?

17 A. I would say to start off that the definition of
18 cycling versus baseload/load following have to be
19 understood. When a unit cycles --- and this is the way
20 very much --- very many of your gas plants operate today.
21 They --- they can start up and shut down quickly.

22 That means when --- when I say that they're
23 online running producing power and that very night, in
24 fact, they may be shutoff. The very next morning or two
25 days from now, whenever, short duration likely they may

1 be called on to operate again. That is --- in my mind
2 that is cycling, when a unit is on and off.

3 And, in fact, those units, they operate
4 according to number of starts. And what I mean by that
5 is they keep track of the number of starts that they have
6 on that unit. After a prescribed number of starts
7 according to the OEM they actually will have to tear that
8 unit down, take it --- take it out of service, tear it
9 down, overhaul according to OEM recommendations.

10 CHAIRMAN:

11 And that's the cycling?

12 A. That's correct. A baseload --- so when I'm
13 cycling --- let me back up half a step --- when I'm
14 cycling a unit on and off I'm taking it, changing the
15 pressure, temperature's, operating conditions basically
16 from operating conditions to ambient and back when I
17 start it back up.

18 The Pleasants unit do not cycle on and off.
19 They are a baseload unit. They operate between 300 and
20 650 megawatts. What that means is in --- in that load
21 following band in that 300 to 650 megawatts ---.

22 CHAIRMAN:

23 Load following?

24 A. Correct.

25 CHAIRMAN:

1 No. Load following meaning? And I ---
2 I checked this term out, but for the record explain that.

3 A. Load following is operating the unit according
4 to essentially a market demand or ---.

5 CHAIRMAN:

6 Baseload unit?

7 A. Baseload out whatever's required out on the high
8 transmission lines to --- to support that. When I
9 operate my unit between 300 and 650 megawatts I preserve
10 feed water, steam --- feed water conditions, steam
11 conditions, pressures, temperatures and otherwise. What
12 I mean by that is I'm providing that turbine with the
13 same steam conditions at 300 megawatts as I am at 650
14 megawatts.

15 CHAIRMAN:

16 And the advantage of that is what?
17 That sounds to me like it would wear on it. I'm sure
18 that's just the obvious observation you've heard all day,
19 but --- but what is the advantage of running it at 300
20 and ---?

21 A. My equipment --- and it doesn't matter whether
22 you're talking about the boiler pumps or the turbines, is
23 designed to operate within certain pressures and
24 temperatures. In this case we'll talk about the turbine.
25 I want to preserve my steam conditions such that it

1 operates, number one, most efficiently and, number two,
2 it minimizes, actually minimizes, the wear that that
3 turbine will see given those steam conditions.

4 And then, in fact, if I were to go outside of my
5 operating parameters and let's say send a steam that's
6 995 degrees to that turbine rather than 1,010 what that
7 does as that steam expands through that turbine and it
8 loses its energy it's being used up through that turbine.
9 It will result in water formation. I've gone from high
10 energy steam and I want water at the back end of this
11 turbine. It will result in water formation earlier in the
12 stages of that turbine and result in erosion to the
13 turbine blades. That's just one example.

14 CHAIRMAN:

15 All right, sir. Thank you, Mr. Evans.
16 Appreciate your testimony.

17 A. Thank you.

18 CHAIRMAN:

19 It is 6:46. I'm not anxious to keep
20 going, but if you want to keep going awhile, we could.

21 ATTORNEY AUVILLE:

22 It depends on how much Cross is
23 reasonably anticipated for Ms. Kauffman. She'll be the
24 next witness I believe.

25 ATTORNEY ROBERTS:

1 Too much.

2 ATTORNEY AUVILLE:

3 Too much? Okay.

4 ATTORNEY WILLIAMSON:

5 We have a reasonable amount.

6 CHAIRMAN:

7 Well, it sounds you need to get a good
8 night's sleep then. All right. It's 6:46. We'll see
9 you at 8:30 tomorrow morning.

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11 HEARING CONCLUDED AT 6:46 P.M.

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CERTIFICATE

I hereby certify, as the stenographic reporter, that the foregoing proceedings were taken stenographically by me, and thereafter reduced to typewriting by me or under my direction; and that this transcript is a true and accurate record to the best of my ability.

I certify that the attached transcript meets the requirements set forth within article twenty-seven, chapter forty-seven of the West Virginia Code.

A handwritten signature in cursive script, appearing to read "Caroline Swanson", is written over a horizontal line.

Caroline Swanson,

Court Reporter